

# **Scientists, Engineers, and Technicians in the United States: 1998**

**Detailed Statistical Tables**

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# GENERAL NOTES

In this report, estimates are presented of the total number of positions filled by scientists, engineers, and technicians employed in the U.S. economy in 1998. The estimates were developed from the Occupational Employment Statistics (OES) Survey, a Federal/state program under which national and state estimates are generated of employment by industry for nonfarm wage and salary workers. The Bureau of Labor Statistics (BLS) of the U.S. Department of Labor has primary responsibility for developing OES survey procedures and for providing states with technical guidance and assistance with survey problems. State Employment Security Agencies implement the survey at the state level and prepare current and projected employment statistics for these labor markets. Some states also prepare substate estimates.

The Division of Science Resources Statistics of the National Science Foundation has enhanced the BLS effort since 1977 by financing the collection of detailed estimates on the types of scientific and technical jobs filled by industry. Analysis of this information yields insights into the dynamics of the labor market. Industries identified in the tables of this report are from the "Numerical List of Short Titles" in the *Standard Industrial Classification (SIC) Manual, revised edition*. The numbers of scientists, engineers, and technicians for a few industries at the two-digit SIC level (tables A-2, A-3, and A-4) in this 1998 edition differ from those in editions covering survey cycles prior to 1989 because some industries were recoded between the 1986 and 1989 surveys. Starting with the 1990 edition, greater noncomparability has occurred at the three-digit level of detail (tables A-1 and

A-5.1 through A-5.6 for 1998) because of more extensive recoding. Prior to the 1996 survey cycle, the OES survey covered only about one-third of the economy in each cycle, covering each SIC industry once every three years. Because of the survey's transition from a one-third-of-economy basis to a full-economy basis in 1996, BLS counsels data users that 1996 data carry large standard errors and should therefore be used with extreme caution, particularly if compared with data from neighboring years.

For reasons outlined above, estimates in 1988–95 tables should be compared with those for 1987 (and earlier years) only after consulting the 1987 SIC revisions to determine industry comparability, and annual data for 1997–present can be compared to pre-1996 data—with respect to a specific industry—only for those pre-1996 years in which that industry was covered.

Requests for previously published data and additional information should be directed to

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# TECHNICAL NOTES<sup>1</sup>

## GENERAL

The 1998 occupational employment estimates at the national, state, and Metropolitan Statistical Area (MSA) level were based on data from the 1996, 1997, and 1998 Occupational Employment Statistics (OES) Surveys.<sup>2</sup> The OES survey is a Federal-state cooperative program that provides the states support to collect data for their own surveys so they can produce estimates of specific occupational employment by industry within their MSAs. The Bureau of Labor Statistics (BLS) provided the states with survey procedures, technical guidance, a sample for each MSA, systems for survey estimation, and troubleshooting assistance. State Employment Security Agencies (SEAS) from all fifty states, plus the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participated in this survey. Occupational employment estimates were produced by BLS-Washington using employment data from these participants. State-level estimates can be obtained from the individual SEAS.

## SCOPE OF SURVEY

The survey covered private establishments in SIC codes 07, 10, 12–17, 20–42, 44–65, 67, 70, 72, 73, 75, 76, 78–84, 86, 87, and 89. The survey also covered private and government establishments in SIC codes 806, 821, 822, 824, and 829. Additionally, the survey covered state and local government establishments (excluding hospitals and education). Furthermore, a census was taken of Federal Government establishments including postal workers in the 1998 survey.

The reference date of the survey was the week that included October 12, November 12, or December 12. The pay period including the 12<sup>th</sup> day of the reference

month is standard for Federal agencies collecting employment data. The reference date for any particular establishment in this survey was dependent on its two-digit SIC code. See the table below.

Reference Date	Industries Surveyed
October 12	07, 15–17, 41, 46, 50–62, 67, 70, 73, 79, 84
November 12	26–28, 30, 35, 36, 40, 42, 45, 47, 48, 63–65, 75, 76, 78, 80, 81, 83, 86, 87, 89
December 12	10, 12–14, 20–25, 29, 31–34, 37–39, 44, 49, 72, 82, and state and local governments

## METHOD OF COLLECTION

Survey schedules were initially mailed to virtually all sampled establishments. Personal visits, however, were made to some of the larger establishments.

Two additional mailings were sent to nonresponding establishments at approximately six week intervals. Telephone followups and, in some cases, personal visits were made to nonrespondents considered critical to the survey because of their size.

## SAMPLING PROCEDURES

The sampling frame for this survey was the list of establishments that reported to the state Unemployment Insurance (U.I.) files for the two-digit SICs listed above. Each quarter, the list from each state is compiled into a single file at BLS, called the Universe Database (UDB). For the 1996 survey, the sample frame was the UDB file from the second quarter of 1995; for the 1997 survey, it was from the third quarter of 1996; and for the 1998 survey, it was from the second quarter of 1997. These frames were supplemented with a list supplying establishment information on Railroads (SIC 401).

A census is taken of Federal Government establishments each year. Data representing Federal Government employment and wages are obtained at the end of the survey process from the Federal Government's Office of Personnel Management.

Establishments in the universe were stratified by state, MSA, three-digit SIC, and size of firm (*i.e.*, size class).

<sup>1</sup> Extensive portions of the material in these Technical Notes have been excerpted or reproduced *verbatim* from U.S. Department of Labor, Bureau of Labor Statistics: *Occupational Employment and Wages, 1998* (Bulletin 2528, June 2000, "Appendix B. Survey Methods and Reliability of the 1998 Occupational Employment Statistics Estimates," pp. 125–131). Readers are encouraged to consult that Appendix for more complete explanations. Until supplanted by later survey cycles, the 1998 Appendix B can be accessed at [http://stats.bls.gov/oes/1998/oes\\_tec.htm](http://stats.bls.gov/oes/1998/oes_tec.htm). Thereafter, users should consult the OES Home Page at <http://stats.bls.gov/oeshome.htm>.

<sup>2</sup> Although estimates are provided here only at the national level, the national estimates are calculated from state and MSA data, as described in the text and more fully in Bulletin 2528.

U.I. reporting establishments that have 1–4 employees were sampled for the first time in 1998. Prior to 1998, establishments with 5–9 employees were assigned larger weights to account for the “size class 1” establishments. Establishments in higher size classes are sampled with virtual certainty across the three-year cycle of the survey. Approximately one third of these units were selected within each MSA/SIC/size class for the 1996 sample, another one third of these units were selected within each MSA/SIC/size class for the 1997 sample, and the final one third of these units were selected within each MSA/SIC/size class for the 1998 sample.

## RESPONSE

Of the 380,833 eligible units from the 1996 sample, usable responses were obtained from 276,989, producing a response rate of 72.7 percent based on units. Of the 383,861 eligible units from the 1997 sample, usable responses were obtained from 301,671, producing a response rate of 78.6 percent based on units. Of the 363,267 eligible units from the 1998 sample, usable responses were obtained from 284,159, producing a response rate of 78.2 percent based on units.

## ESTIMATION

### SAMPLE WEIGHTS

Each sampled establishment was assigned an original sampling weight, the reciprocal of the establishment’s probability of selection (i.e., its design weight) within its sampled year.

Weights were modified for each in-scope establishment in a cell by dividing the establishment’s design weight by a factor indicating the number of years for which sample units were selected from that sampling cell. This weight was used in the calculation of the 1998 estimates based on combining data from the 1996, 1997, and 1998 surveys.

### NONRESPONSE

Nonresponding establishments are accounted for in the OES survey by an imputation process. The staffing pattern is imputed using a hot-deck “nearest-neighbor” imputation method. This method searches the responding

establishments within a defined cell and finds the responding establishment that most closely matches the nonresponding establishment for key classification values (Area/SIC/Size Class). The staffing pattern, or employment distribution, of the responding establishment is used as the staffing pattern of the nonresponding establishment.

## COMBINING AND BENCHMARKING MULTI-YEAR DATA

In order to reduce the variability of detailed geographic level estimates, data from three years have been combined to increase the effective sample size. The 1998 OES estimates are based on three years of combined OES survey data. Each year’s sample is weighted to represent the sample as it appeared at the time the sample was selected. In order to combine the data, each unit’s weight is modified so that the aggregate sample represents the universe. This is done via a fairly simple procedure. Each unit weight is divided by the number of years that sample units were selected for that stratum.

A ratio estimator is used to develop estimates of occupational employment. The auxiliary variable used was the 1998 reference-month population value of total employment. In order to balance the state’s need for estimates at different levels of geographic and industrial aggregation, the ratio adjustment process was applied as a hierarchical series of ratio adjustment factors, or “benchmark” factors (BMFs).<sup>3</sup>

### ESTIMATED EMPLOYMENT

As mentioned above, a ratio estimator is used to develop estimates of occupational employment. The auxiliary variable is the population value of total employment obtained from the refined Unemployment Insurance files for the 1998 reference month. Within each MSA, the estimated employment for an occupation at the reported three-digit SIC level was calculated by multiplying the weighted employment by its ratio factor. The estimated employment for an occupation at the all-industry level was obtained by summing the occupational employment estimates across all industries within an MSA reporting that occupation. Employment data for Federal Government workers in each occupation were added to the survey-derived data.

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<sup>3</sup> See 1998 Appendix B, cited in note (1) above, for more detail on benchmarking.

## VARIANCE OF ESTIMATES

Estimates of sampling error are calculated to allow the users to determine if occupational employment estimates are reliable enough for their needs. Only a probability-based sample can be used to calculate estimates of sampling error from the sample itself.

The formula used to estimate occupational employment variances (a common measure of sampling error) is based on the survey's sample design and method of estimation. The OES survey used a subsample replication technique called the jackknife random group to estimate variances of occupational employment. In this technique each sampled establishment is assigned to one of G random groups. Using the data in these groups, G subsamples are formed from the parent sample. Next, G estimates of total employment for an occupation P are calculated, one employment estimate per subsample. Afterwards, the variability of these G employment estimates is calculated. This variability is our variance estimate of occupation P's employment estimate.

## RELIABILITY OF THE ESTIMATES

Estimates developed from a sample may differ from the results of a census. Two types of error, sampling and nonsampling, can occur in estimates calculated from a sample. *Sampling error* occurs because our observations are based on a sample, not on the entire population. *Nonsampling error* occurs because of response and operational errors in the survey. Unlike sampling error, this form of error can also occur in a census.

## SAMPLING ERRORS

The particular sample used in this survey is one of a large number of many possible samples of the same size that could have been selected using the same sample design. Estimates derived from different samples would tend to differ from one another. The variance of a survey estimate is a measure of the variation among the estimates from all possible samples. The standard error of a survey estimate is the square root of its variance; the relative standard error is the ratio of the standard error to the estimate itself.

Using the sample estimate and its standard error allows the user to construct an interval estimate with a prescribed level of confidence that the interval will include the mean value of the estimate from all possible samples.

For example, suppose that an estimated occupational employment total is 5,000 with an associated relative standard error of 2.0 percent. Based on these data, the standard error of the estimate is 100 (2 percent of 5,000). A 68-percent confidence interval for the employment estimate is  $(5,000 \pm 100)$  or (from 4,900 to 5,100). Approximately 68 percent of the intervals constructed in this manner will include the mean of all possible employment estimates as computed from all possible samples. A 95-percent confidence interval for the employment estimate is  $(5,000 \pm 200)$  or (4,800 to 5,200). Approximately 95 percent of the intervals constructed in this manner will include the mean of all possible employment estimates as computed from all possible samples. Estimates of sampling errors for occupational employment estimates are available for most estimates.

## NONSAMPLING ERROR

This type of error is attributable to several causes such as an inability to obtain information for all establishments in the sample; differences in the respondents' interpretation of the survey question; an inability or unwillingness of the respondents to provide correct information; errors made in recording, coding, or processing the data; and errors made in imputing values for missing data. Explicit measures of the effects of nonsampling error are not available.

Several edit and quality control procedures were used to reduce nonsampling error. For example, completed survey questionnaires were checked for data consistency. Followup mailings were sent out to nonresponding establishments to improve the survey response rate. Response analysis studies were conducted to assess the respondents' comprehension of the questionnaire. See the section below for additional information on the quality control procedures used by the OES survey. The relative standard error indicates the magnitude of the sampling error. It does not measure nonsampling error, including any biases in the data. Particular care should be exercised in the interpretation of small estimates or in small differences between estimates when the sampling error is relatively large or the magnitude of the bias is unknown.

There were 846 occupational categories defined for the 1996, 1997, and 1998 OES surveys. Within each three-digit industry, an average of 153 occupations are explicitly collected. Occupations that occur only rarely within an industry are collected in "All Other" residual categories.

Because of the All Other residual categories, the “All Industry” total employment for some occupations may be underestimated. That is, BLS expects that the true population value for an occupation, across all industries, is its weighted employment based on its occupation code and some portion of the weighted residual employment from the “All Other” categories.

The magnitude of this bias is unknown. In general, however, occupational employment within the “All Other” residual categories is not a significant proportion of the total employment of any specific occupation. Employment coded in residual occupations accounts for 10.4 percent of the total occupational employment at the national level. Note that some portion of the employment coded in residual occupations is correctly coded as residual employment. That is, there are cases where an occupation is a relatively new occurrence, and is not yet represented on any questionnaire as a specific occupation. There are also occupations that have declined in employment to the point where they are no longer represented as specific occupations on any questionnaire.

## QUALITY CONTROL MEASURES

A major concern with a cooperative program like the OES survey is to accommodate state-specific publication needs with limited resources while standardizing survey procedures across all fifty states, the District of Columbia, and the U.S. territories; and in the process, produce quality estimates. Controlling sources of non-sampling error in this decentralized environment can be difficult. In addition, edit and validation checks are

distributed across eight regional offices, which can lead to procedural differences between the regions. Two important quality control measures employed by the OES survey are the Survey Processing and Management (SPAM) System and the Estimates Delivery System (EDS). Both systems were developed to provide a consistent and automated framework for survey processing and to reduce the workload at the state, regional, and national levels.

By standardizing data processing activities such as refining mailing addresses, addressing envelopes and mailers, editing and updating questionnaires, producing management reports, and calculating employment estimates, the SPAM system and the EDS have consequently standardized survey methodology. This has reduced the number of errors on the data files as well as the time needed to review them.

Other quality control measures implemented in the OES survey include

- Followup of solicitations of nonrespondents (especially critical nonrespondents),
- Review of schedules to verify the accuracy and reasonableness of the reported data,
- Adjustments of a typical reporting units on the data file,
- Validation of the benchmark employment figures and of the benchmark factors,
- Validation of the analytical tables of estimates (at the two- and three-digit SIC levels), and
- Use of bar codes to reduce keypunch errors.

SECTION A:  
DETAILED STATISTICAL TABLES



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**Table A-1. Employed scientists, engineers, technicians (SETs), and SET managers,  
by detailed industry of employment: 1998**

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Total.....</b>	4,697,800	100.0	312,800	100.0	1,036,500	100.0	1,614,300	100.0	1,734,200	100.0
<b>Agriculture, forestry, and fishing.....</b>	3,800	0.1	0	0.0	700	0.1	100	<	2,900	0.2
<b>Agricultural services.....</b>	3,800	0.1	0	0.0	700	0.1	100	<	2,900	0.2
Crop services.....	500	<	0	0.0	300	<	100	<	100	<
Veterinary services.....	<	<	0	0.0	0	0.0	0	0.0	<	<
Animal services, except veterinary.....	1,000	<	0	0.0	200	<	0	0.0	800	<
Farm labor and management services.....	200	<	0	0.0	200	<	0	0.0	0	0.0
Landscape and horticultural services.....	2,100	<	0	0.0	<	<	100	<	2,000	0.1
<b>Mining.....</b>	50,100	1.1	3,400	1.1	13,200	1.3	17,800	1.1	15,800	0.9
<b>Metal mining.....</b>	4,100	0.1	100	<	1,000	0.1	1,500	0.1	1,600	0.1
Iron ores.....	400	<	0	0.0	<	<	200	<	200	<
Copper ores.....	1,300	<	0	0.0	200	<	700	<	400	<
Lead and zinc ores.....	100	<	0	0.0	0	0.0	100	<	0	0.0
Gold and silver ores.....	1,900	<	100	<	500	0.1	500	<	800	<
Metal mining services.....	200	<	0	0.0	100	<	<	<	0	0.0
Misc. metal ores, n.e.c.....	200	<	0	0.0	100	<	<	<	100	<
<b>Coal mining.....</b>	3,000	0.1	300	0.1	300	<	1,300	0.1	1,100	0.1
Bituminous coal and lignite mining.....	2,900	0.1	300	0.1	300	<	1,200	0.1	1,100	0.1
Coal mining services.....	<	<	0	0.0	0	0.0	<	<	0	0.0
<b>Oil and gas extraction.....</b>	40,700	0.9	2,800	0.9	11,400	1.1	14,200	0.9	12,300	0.7
Crude petroleum and natural gas.....	27,900	0.6	1,500	0.5	9,200	0.9	9,900	0.6	7,300	0.4
Natural gas liquids.....	500	<	<	<	200	<	200	<	100	<
Oil and gas field services.....	12,300	0.3	1,300	0.4	2,000	0.2	4,100	0.3	4,900	0.3
<b>Nonmetallic minerals, except fuels.....</b>	2,400	0.1	200	0.1	600	0.1	800	<	800	<
Crushed and broken stone.....	800	<	100	<	200	<	300	<	200	<
Sand and gravel.....	400	<	<	<	200	<	200	<	<	<
Clay, ceramic, and refractory minerals.....	500	<	0	0.0	<	<	100	<	300	<
Chemical and fertilizer minerals.....	500	<	100	<	<	<	200	<	200	<
Nonmetallic minerals services.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Misc. nonmetallic minerals.....	100	<	0	0.0	<	<	100	<	<	<
<b>Construction.....</b>	89,900	1.9	3,900	1.3	1,500	0.1	41,100	2.5	43,400	2.5
<b>General building contractors.....</b>	21,100	0.4	1,800	0.6	300	<	10,300	0.6	8,700	0.5
Residential building construction.....	5,200	0.1	300	0.1	100	<	1,300	0.1	3,700	0.2
Operative builders.....	600	<	100	<	100	<	100	<	400	<
Nonresidential building excluding building.....	15,300	0.3	1,500	0.5	200	<	9,000	0.6	4,700	0.3
<b>Heavy construction, excluding building.....</b>	26,800	0.6	1,200	0.4	300	<	17,400	1.1	7,900	0.5
Highway and street construction.....	4,600	0.1	500	0.1	<	<	2,500	0.2	1,700	0.1
Heavy construction, except highway.....	22,200	0.5	700	0.2	300	<	14,900	0.9	6,300	0.4

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Special trade contractors.....</b>	41,900	0.9	900	0.3	800	0.1	13,500	0.8	26,700	1.5
Plumbing, heating, air conditioning.....	13,000	0.3	300	0.1	0	0.0	6,100	0.4	6,600	0.4
Painting and paper hanging.....	<	<	0	0.0	0	0.0	0	0.0	<	<
Electrical work.....	22,200	0.5	500	0.2	600	0.1	5,600	0.3	15,500	0.9
Masonry, stonework, and plastering.....	200	<	0	0.0	0	0.0	100	<	200	<
Carpentry and floor work.....	600	<	0	0.0	<	<	100	<	400	<
Roofing, siding, and sheet-metal work.....	600	<	0	0.0	0	0.0	100	<	500	<
Concrete work.....	400	<	0	0.0	0	0.0	200	<	200	<
Water-well drilling.....	<	<	0	0.0	0	0.0	<	<	0	0.0
Misc. special trade contractors.....	4,900	0.1	100	<	100	<	1,300	0.1	3,300	0.2
<b>Manufacturing.....</b>	1,557,300	33.1	118,200	37.8	176,700	17.0	774,000	47.9	488,400	28.2
<b>Food and kindred products.....</b>	31,800	0.7	3,300	1.1	5,400	0.5	5,400	0.3	17,700	1.0
Meat products.....	4,100	0.1	500	0.2	600	0.1	700	<	2,300	0.1
Dairy products.....	4,700	0.1	200	0.1	800	0.1	600	<	3,100	0.2
Preserved fruits & vegetables.....	5,100	0.1	600	0.2	800	0.1	600	<	3,200	0.2
Grain mill products.....	4,100	0.1	500	0.2	1,000	0.1	800	0.1	1,800	0.1
Bakery products.....	2,200	<	300	0.1	200	<	1,000	0.1	700	<
Sugar and confectionery products.....	2,900	0.1	300	0.1	500	<	600	<	1,600	0.1
Fats and oils.....	1,000	<	100	<	200	<	200	<	500	<
Beverages.....	5,500	0.1	600	0.2	1,100	0.1	500	<	3,300	0.2
Misc. food and kindred products.....	2,200	<	200	0.1	300	<	400	<	1,200	0.1
<b>Tobacco products.....</b>	4,900	0.1	100	<	2,800	0.3	800	0.1	1,200	0.1
Cigarettes.....	4,800	0.1	100	<	2,700	0.3	800	0.1	1,200	0.1
Chewing and smoking tobacco.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Tobacco stemming and redrying.....	<	<	0	0.0	<	<	0	0.0	0	0.0
<b>Textile mill products.....</b>	9,600	0.2	900	0.3	1,500	0.1	3,000	0.2	4,200	0.2
Broadwoven fabric mills, cotton.....	900	<	100	<	200	<	200	<	400	<
Broadwoven fabric mills, manmade.....	1,500	<	200	0.1	200	<	700	<	500	<
Broadwoven fabric mills, wool.....	100	<	0	0.0	100	<	0	0.0	100	<
Narrow fabric mills.....	300	<	<	<	100	<	100	<	100	<
Knitting mills.....	1,400	<	100	<	200	<	300	<	800	<
Textile finishing, except wool.....	1,200	<	100	<	200	<	200	<	700	<
Carpets and rugs.....	1,000	<	100	<	200	<	300	<	400	<
Yarn and thread mills.....	1,000	<	100	<	100	<	400	<	500	<
Miscellaneous textile goods.....	2,200	<	200	0.1	300	<	900	0.1	800	<

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Apparel and other textile products.....</b>	4,900	0.1	500	0.2	1,100	0.1	1,800	0.1	1,500	0.1
Men's & boys' suits and coats.....	100	<	0	0.0	100	<	100	<	0	0.0
Men's & boys' furnishings.....	1,500	<	200	0.1	400	<	400	<	500	<
Women's and misses' outerwear.....	500	<	100	<	200	<	100	<	100	<
Women's and children's undergarments.....	300	<	0	0.0	100	<	100	<	100	<
Hats, caps, and millinery.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Girls' and children's outerwear.....	100	<	0	0.0	<	<	<	<	<	<
Miscellaneous apparel and accessories.....	300	<	0	0.0	100	<	100	<	100	<
Misc. fabricated textile products.....	2,100	<	300	0.1	200	<	1,100	0.1	600	<
<b>Lumber and wood products.....</b>	11,800	0.3	1,000	0.3	2,800	0.3	2,300	0.1	5,700	0.3
Logging.....	600	<	0	0.0	600	0.1	0	0.0	<	<
Sawmills and planing mills.....	1,900	<	200	0.1	1,200	0.1	300	<	300	<
Millwork, plywood & structural members.....	6,500	0.1	600	0.2	900	0.1	1,300	0.1	3,700	0.2
Wood containers.....	100	<	0	0.0	<	<	<	<	100	<
Wood buildings and mobile homes.....	1,900	<	200	<	<	<	400	<	1,300	0.1
Miscellaneous wood products.....	800	<	100	<	100	<	300	<	300	<
<b>Furniture and fixtures.....</b>	11,700	0.2	1,100	0.4	900	0.1	4,000	0.2	5,800	0.3
Household furniture.....	2,700	0.1	300	0.1	200	<	800	0.1	1,300	0.1
Office furniture.....	3,100	0.1	300	0.1	400	<	1,300	0.1	1,200	0.1
Public building & related furniture.....	2,000	<	200	0.1	200	<	700	<	900	0.1
Partitions and fixtures.....	3,100	0.1	300	0.1	100	<	800	0.1	1,900	0.1
Miscellaneous furniture and fixtures.....	900	<	100	<	100	<	400	<	400	<
<b>Paper and allied products.....</b>	23,000	0.5	2,100	0.7	3,900	0.4	10,200	0.6	6,800	0.4
Pulp mills.....	600	<	100	<	100	<	300	<	200	<
Paper mills.....	7,600	0.2	600	0.2	900	0.1	4,100	0.3	2,000	0.1
Paperboard mills.....	2,600	0.1	200	0.1	500	<	1,200	0.1	800	<
Paperboard containers and boxes.....	2,400	0.1	300	0.1	300	<	900	0.1	1,000	0.1
Misc. converted paper products.....	9,800	0.2	1,000	0.3	2,100	0.2	3,900	0.2	2,900	0.2
<b>Printing and publishing.....</b>	24,500	0.5	2,600	0.8	8,900	0.9	3,000	0.2	10,000	0.6
Newspapers.....	6,000	0.1	700	0.2	2,400	0.2	600	<	2,300	0.1
Periodicals.....	3,200	0.1	300	0.1	1,500	0.1	200	<	1,200	0.1
Books.....	3,000	0.1	400	0.1	1,400	0.1	300	<	1,000	0.1
Miscellaneous publishing.....	3,900	0.1	300	0.1	1,300	0.1	400	<	1,900	0.1
Commercial printing.....	5,500	0.1	600	0.2	1,300	0.1	1,100	0.1	2,500	0.1
Manifold business forms.....	400	<	0	0.0	200	<	100	<	200	<
Greeting cards.....	800	<	100	<	300	<	100	<	300	<
Blankbooks and bookbinding.....	700	<	100	<	200	<	100	<	300	<
Printing trade services.....	1,200	<	100	<	400	<	100	<	600	<

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Chemicals and allied products.....</b>	180,300	3.8	10,600	3.4	64,100	6.2	43,400	2.7	62,100	3.6
Industrial inorganic chemicals.....	21,400	0.5	0	0.0	3,800	0.4	10,100	0.6	7,600	0.4
Plastics materials and synthetics.....	27,500	0.6	1,500	0.5	6,300	0.6	9,500	0.6	10,200	0.6
Drugs.....	61,000	1.3	4,300	1.4	30,800	3.0	7,600	0.5	18,200	1.1
Soap, cleaners, and toilet goods.....	14,100	0.3	1,700	0.5	5,900	0.6	2,500	0.2	4,000	0.2
Paints and allied products.....	6,900	0.1	300	0.1	2,100	0.2	900	0.1	3,700	0.2
Industrial organic chemicals.....	29,200	0.6	1,500	0.5	9,600	0.9	7,500	0.5	10,700	0.6
Agricultural chemicals.....	6,700	0.1	300	0.1	2,200	0.2	1,800	0.1	2,400	0.1
Miscellaneous chemical products.....	13,600	0.3	1,000	0.3	3,400	0.3	3,600	0.2	5,500	0.3
<b>Petroleum and coal products.....</b>	14,400	0.3	900	0.3	2,300	0.2	6,100	0.4	5,200	0.3
Petroleum refining.....	12,300	0.3	700	0.2	1,800	0.2	5,500	0.3	4,400	0.3
Asphalt paving and roofing materials.....	700	<	100	<	100	<	200	<	300	<
Misc. petroleum and coal products.....	1,400	<	100	<	400	<	300	<	600	<
<b>Rubber and misc. plastics products.....</b>	40,200	0.9	5,000	1.6	2,900	0.3	17,900	1.1	14,400	0.8
Tires and inner tubes.....	3,100	0.1	200	0.1	200	<	1,300	0.1	1,300	0.1
Rubber and plastics footwear.....	100	<	0	0.0	100	<	<	<	0	0.0
Hose & belting & gaskets & packing.....	4,400	0.1	500	0.2	400	<	1,900	0.1	1,600	0.1
Fabricated rubber products, n.e.c.....	4,900	0.1	700	0.2	400	<	1,900	0.1	2,000	0.1
Miscellaneous plastics products, n.e.c.....	27,700	0.6	3,700	1.2	1,600	0.2	12,800	0.8	9,600	0.6
<b>Leather and leather products.....</b>	900	<	100	<	300	<	200	<	400	<
Leather tanning and finishing.....	400	<	<	<	100	<	<	<	200	<
Footwear, except rubber.....	300	<	100	<	100	<	100	<	100	<
Luggage.....	100	<	0	0.0	100	<	100	<	<	<
Handbags and personal leather goods.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Leather goods, n.e.c.....	100	<	0	0.0	0	0.0	<	<	<	<
<b>Stone, clay and glass products.....</b>	17,300	0.4	1,500	0.5	1,700	0.2	7,700	0.5	6,400	0.4
Flat glass.....	700	<	100	<	100	<	300	<	300	<
Glass and glassware, pressed or blown.....	3,700	0.1	300	0.1	500	<	2,000	0.1	1,000	0.1
Products of purchased glass.....	1,900	<	200	0.1	100	<	1,000	0.1	600	<
Cement, hydraulic.....	1,500	<	100	<	300	<	400	<	700	<
Structural clay products.....	900	<	100	<	100	<	400	<	300	<
Pottery and related products.....	1,500	<	100	<	100	<	600	<	600	<
Concrete, gypsum, and plaster products.....	3,600	0.1	400	0.1	200	<	1,300	0.1	1,600	0.1
Cut stone and stone products.....	300	<	0	0.0	0	0.0	0	0.0	300	<
Misc. nonmetallic mineral products.....	3,300	0.1	300	0.1	400	<	1,600	0.1	1,100	0.1

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Primary metal industries.....</b>	39,300	0.8	3,200	1.0	4,800	0.5	20,000	1.2	11,300	0.6
Blast furnace and basic steel products.....	12,700	0.3	900	0.3	2,100	0.2	6,300	0.4	3,500	0.2
Iron and steel foundries.....	4,800	0.1	400	0.1	200	<	2,800	0.2	1,400	0.1
Primary nonferrous metals.....	3,800	0.1	200	0.1	400	<	1,700	0.1	1,500	0.1
Secondary nonferrous metals.....	900	<	100	<	200	<	300	<	300	<
Nonferrous rolling and drawing.....	12,300	0.3	1,200	0.4	1,600	0.2	6,300	0.4	3,200	0.2
Nonferrous foundries (castings).....	3,000	0.1	300	0.1	100	<	1,700	0.1	900	<
Miscellaneous primary metal products.....	1,900	<	200	0.1	100	<	1,000	0.1	500	<
<b>Fabricated metal products.....</b>	66,000	1.4	6,200	2.0	2,500	0.2	31,300	1.9	26,000	1.5
Metal cans and shipping containers.....	700	<	100	<	100	<	300	<	200	<
Cutlery, hand tools, and hardware.....	5,200	0.1	600	0.2	300	<	2,700	0.2	1,600	0.1
Plumbing and heating, except electric.....	2,500	0.1	300	0.1	200	<	1,100	0.1	900	<
Fabricated structural metal products.....	23,800	0.5	1,700	0.6	500	<	8,600	0.5	13,100	0.8
Screw machine products, bolts, etc.....	3,200	0.1	400	0.1	100	<	1,700	0.1	1,000	0.1
Metal forgings and stampings.....	9,600	0.2	1,100	0.3	300	<	5,500	0.3	2,800	0.2
Metal services, n.e.c.....	2,300	<	300	0.1	200	<	1,200	0.1	700	<
Ordnance and accessories, n.e.c.....	5,300	0.1	300	0.1	400	<	3,500	0.2	1,100	0.1
Misc. fabricated metal products.....	13,500	0.3	1,400	0.5	500	<	6,900	0.4	4,700	0.3
<b>Industrial machinery and equipment.....</b>	304,500	6.5	24,800	7.9	13,700	1.3	173,200	10.7	92,800	5.4
Engines and turbines.....	11,400	0.2	1,100	0.4	500	<	7,200	0.4	2,500	0.1
Farm and garden machinery.....	6,800	0.1	800	0.2	500	<	3,300	0.2	2,300	0.1
Construction and related machinery.....	24,400	0.5	2,100	0.7	700	0.1	13,500	0.8	8,200	0.5
Metalworking machinery.....	30,300	0.6	2,400	0.8	700	0.1	15,200	0.9	12,100	0.7
Special industry machinery.....	29,900	0.6	2,400	0.8	800	0.1	15,600	1.0	11,100	0.6
General industrial machinery.....	31,600	0.7	3,000	1.0	1,200	0.1	17,300	1.1	10,200	0.6
Computer and office equipment.....	134,400	2.9	9,500	3.0	8,200	0.8	83,600	5.2	33,100	1.9
Refrigeration and service machinery.....	17,400	0.4	1,700	0.5	900	0.1	8,300	0.5	6,400	0.4
Industrial machinery, n.e.c.....	18,300	0.4	1,800	0.6	300	<	9,200	0.6	7,000	0.4
<b>Electronic &amp; other electric equipment.....</b>	294,300	6.3	21,700	6.9	18,100	1.7	163,600	10.1	90,900	5.2
Electric distribution equipment.....	10,700	0.2	1,000	0.3	700	0.1	5,300	0.3	3,700	0.2
Electrical industrial apparatus.....	18,500	0.4	1,400	0.4	400	<	9,900	0.6	6,800	0.4
Household appliances.....	6,000	0.1	500	0.2	300	<	3,300	0.2	1,800	0.1
Electric lighting and wiring equipment.....	11,600	0.2	1,000	0.3	400	<	6,500	0.4	3,600	0.2
Household audio and video equipment.....	10,400	0.2	700	0.2	400	<	3,900	0.2	5,400	0.3
Communication equipment.....	77,300	1.6	4,700	1.5	7,900	0.8	45,900	2.8	18,900	1.1
Electronic components and accessories.....	144,100	3.1	11,100	3.5	7,300	0.7	80,000	5.0	45,800	2.6
Misc. electrical equipment & supplies.....	15,800	0.3	1,300	0.4	800	0.1	8,700	0.5	4,900	0.3

See explanatory information and SOURCE at end of table.

Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Transportation equipment.....</b>	270,900	5.8	17,500	5.6	23,200	2.2	168,900	10.5	61,300	3.5
Motor vehicles and equipment.....	94,700	2.0	5,300	1.7	5,800	0.6	62,400	3.9	21,100	1.2
Aircraft and parts.....	119,100	2.5	7,600	2.4	14,200	1.4	68,200	4.2	29,100	1.7
Ship and boat building and repairing.....	9,000	0.2	800	0.3	400	<	4,200	0.3	3,600	0.2
Railroad equipment.....	1,700	<	200	0.1	100	<	1,000	0.1	400	<
Motorcycles, bicycles, and parts.....	1,500	<	300	0.1	100	<	800	0.1	200	<
Guided missiles, space vehicles, parts.....	41,900	0.9	2,600	0.8	2,500	0.2	31,000	1.9	5,800	0.3
Miscellaneous transportation equipment.....	3,000	0.1	700	0.2	100	<	1,200	0.1	1,000	0.1
<b>Instruments and related products.....</b>	198,000	4.2	14,100	4.5	15,100	1.5	108,000	6.7	60,900	3.5
Search and navigation equipment.....	71,900	1.5	4,700	1.5	2,400	0.2	45,400	2.8	19,300	1.1
Measuring and controlling devices.....	70,300	1.5	5,300	1.7	4,000	0.4	36,700	2.3	24,300	1.4
Medical instruments and supplies.....	38,300	0.8	3,000	1.0	5,000	0.5	17,300	1.1	13,000	0.7
Ophthalmic goods.....	1,300	<	100	<	100	<	400	<	600	<
Photographic equipment and supplies.....	15,900	0.3	900	0.3	3,500	0.3	7,900	0.5	3,600	0.2
Watches, clocks, watchcases & parts.....	400	<	0	0.0	100	<	200	<	100	<
<b>Miscellaneous manufacturing industries.....</b>	9,000	0.2	1,100	0.3	900	0.1	3,100	0.2	4,000	0.2
Jewelry, silverware, and plated ware.....	400	<	<	<	100	<	100	<	200	<
Musical instruments.....	500	<	100	<	100	<	100	<	200	<
Toys and sporting goods.....	2,900	0.1	500	0.2	300	<	1,100	0.1	1,100	0.1
Pens, pencils, office, & art supplies.....	800	<	100	<	100	<	200	<	400	<
Costume jewelry and notions.....	200	<	0	0.0	100	<	100	<	<	<
Miscellaneous manufactures.....	4,200	0.1	300	0.1	300	<	1,500	0.1	2,100	0.1
<b>Transportation, communications, and utilities.....</b>	301,100	6.4	25,100	8.0	46,800	4.5	97,400	6.0	131,800	7.6
<b>Railroad transportation.....</b>	6,700	0.1	1,000	0.3	900	0.1	1,700	0.1	3,100	0.2
<b>Local and interurban transit.....</b>	400	<	<	<	300	<	0	0.0	100	<
Local and suburban transportation.....	300	<	<	<	100	<	0	0.0	100	<
Intercity and rural bus.....	200	<	0	0.0	200	<	0	0.0	0	0.0
<b>Trucking and warehousing.....</b>	5,800	0.1	1,100	0.3	2,100	0.2	800	<	2,000	0.1
Trucking and courier services, excluding air.....	4,800	0.1	900	0.3	1,900	0.2	500	<	1,600	0.1
Public warehousing and storage.....	1,000	<	200	0.1	200	<	300	<	400	<
<b>Water transportation.....</b>	3,800	0.1	400	0.1	500	0.1	2,300	0.1	500	<
Deep sea foreign transportation of freight.....	600	<	100	<	300	<	200	<	100	<
Deep sea domestic transportation of freight.....	300	<	0	0.0	100	<	100	<	100	<
Freight transportation on the Great Lakes.....	100	<	0	0.0	0	0.0	100	<	0	0.0
Water transportation of freight, n.e.c.....	500	<	0	0.0	0	0.0	500	<	0	0.0
Water transportation of passengers.....	300	<	<	<	100	<	100	<	<	<
Water transportation services.....	2,100	<	300	0.1	100	<	1,300	0.1	400	<

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Air transportation.....</b>	17,300	0.4	1,800	0.6	5,700	0.5	5,200	0.3	4,600	0.3
Air transportation, scheduled.....	15,700	0.3	1,700	0.5	5,500	0.5	4,600	0.3	4,000	0.2
Air transportation, nonscheduled.....	400	<	100	<	100	<	100	<	100	<
Airports, flying fields, and services.....	1,300	<	100	<	200	<	500	<	500	<
<b>Pipelines, except natural gas.....</b>	1,900	<	100	<	300	<	600	<	1,000	0.1
<b>Transportation services.....</b>	3,100	0.1	300	0.1	900	0.1	200	<	1,600	0.1
Passenger transportation arrangements.....	900	<	100	<	300	<	<	<	500	<
Freight transportation arrangements.....	1,800	<	200	0.1	600	0.1	100	<	900	0.1
Rental of railroad cars.....	100	<	<	<	<	<	<	<	0	0.0
Misc. transportation services.....	300	<	0	0.0	100	<	<	<	200	<
<b>Communications.....</b>	160,500	3.4	11,900	3.8	23,200	2.2	47,500	2.9	77,900	4.5
Telephone communications.....	109,600	2.3	8,800	2.8	20,600	2.0	40,100	2.5	40,200	2.3
Telegraph and other communications.....	1,600	<	100	<	700	0.1	300	<	600	<
Radio and television broadcasting.....	31,700	0.7	1,500	0.5	400	<	3,500	0.2	26,300	1.5
Cable and other pay TV services.....	11,500	0.2	900	0.3	600	0.1	2,000	0.1	8,000	0.5
Communications services, n.e.c.....	6,100	0.1	700	0.2	1,000	0.1	1,700	0.1	2,800	0.2
<b>Utilities and sanitary services.....</b>	101,600	2.2	8,500	2.7	12,900	1.2	39,100	2.4	41,100	2.4
Electric services.....	52,800	1.1	3,600	1.2	5,900	0.6	20,300	1.3	23,000	1.3
Gas production and distribution.....	11,700	0.2	1,400	0.4	1,700	0.2	3,400	0.2	5,100	0.3
Combination utility services.....	23,000	0.5	1,300	0.4	3,300	0.3	9,400	0.6	8,900	0.5
Water supply.....	1,300	<	200	0.1	200	<	300	<	600	<
Sanitary services.....	12,800	0.3	1,900	0.6	1,800	0.2	5,700	0.3	3,400	0.2
Steam and air-conditioning supply.....	<	<	0	0.0	0	0.0	<	<	0	0.0
<b>Wholesale trade.....</b>	252,200	5.4	14,100	4.5	32,100	3.1	76,700	4.8	129,300	7.5
<b>Wholesale trade, durable goods.....</b>	222,400	4.7	11,500	3.7	23,600	2.3	71,300	4.4	116,100	6.7
Motor vehicles, parts, and supplies.....	4,700	0.1	400	0.1	600	0.1	2,100	0.1	1,600	0.1
Furniture and homefurnishings.....	1,200	<	100	<	200	<	300	<	600	<
Lumber and construction materials.....	2,200	<	100	<	100	<	700	<	1,300	0.1
Professional and commercial equipment.....	109,800	2.3	4,600	1.5	15,100	1.5	26,700	1.7	63,400	3.7
Metals and minerals, except petroleum.....	3,000	0.1	400	0.1	200	<	900	0.1	1,500	0.1
Electrical goods.....	58,500	1.2	3,600	1.1	5,400	0.5	22,700	1.4	26,900	1.6
Hardware, plumbing, and heating equipment.....	8,700	0.2	500	0.2	500	<	3,800	0.2	3,900	0.2
Machinery, equipment, and supplies.....	31,200	0.7	1,600	0.5	1,100	0.1	13,700	0.8	14,800	0.9
Miscellaneous durable goods.....	3,200	0.1	300	0.1	400	<	400	<	2,100	0.1

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Wholesale trade, nondurable goods.....</b>	29,700	0.6	2,600	0.8	8,500	0.8	5,400	0.3	13,200	0.8
Paper and paper products.....	3,400	0.1	200	0.1	1,100	0.1	500	<	1,500	0.1
Drugs, proprietaries, and sundries.....	5,000	0.1	500	0.2	1,500	0.1	400	<	2,600	0.1
Apparel, piece goods, and notions.....	1,800	<	200	0.1	500	0.1	500	<	700	<
Groceries and related products.....	4,600	0.1	700	0.2	1,300	0.1	400	<	2,100	0.1
Farm-product raw materials.....	600	<	<	<	200	<	0	0.0	300	<
Chemicals and allied products.....	7,200	0.2	400	0.1	1,800	0.2	2,100	0.1	2,900	0.2
Petroleum and petroleum products.....	2,200	<	200	0.1	400	<	900	0.1	700	<
Beer, wine, and distilled beverages.....	400	<	100	<	100	<	100	<	100	<
Misc. nondurable goods.....	4,600	0.1	300	0.1	1,400	0.1	600	<	2,300	0.1
<b>Retail trade.....</b>	39,100	0.8	3,300	1.0	11,000	1.1	7,300	0.4	17,500	1.0
<b>Building materials and garden supplies.....</b>	3,300	0.1	300	0.1	800	0.1	900	0.1	1,300	0.1
Lumber and other building materials.....	2,900	0.1	300	0.1	600	0.1	900	0.1	1,100	0.1
Paint, glass, and wallpaper stores.....	200	<	0	0.0	100	<	<	<	100	<
Hardware stores.....	100	<	0	0.0	100	<	0	0.0	<	<
Retail nurseries and garden stores.....	100	<	0	0.0	100	<	0	0.0	<	<
Mobile home dealers.....	<	<	0	0.0	0	0.0	0	0.0	<	<
<b>General merchandise stores.....</b>	5,700	0.1	900	0.3	2,800	0.3	800	<	1,200	0.1
Department stores.....	5,200	0.1	800	0.3	2,500	0.2	800	<	1,100	0.1
Variety stores.....	100	<	<	<	<	<	0	0.0	100	<
Misc. general merchandise stores.....	400	<	0	0.0	400	<	0	0.0	100	<
<b>Food stores.....</b>	2,800	0.1	300	0.1	900	0.1	900	0.1	800	<
Grocery stores.....	2,500	0.1	300	0.1	700	0.1	800	<	700	<
Candy, nut and confectionery stores.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Dairy product stores.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Miscellaneous food stores.....	300	<	0	0.0	100	<	100	<	100	<
<b>Automotive dealers and service stations.....</b>	2,500	0.1	<	<	300	<	0	0.0	2,200	0.1
New and used car dealers.....	1,100	<	0	0.0	100	<	0	0.0	1,100	0.1
Used car dealers.....	200	<	0	0.0	100	<	0	0.0	100	<
Auto and home supply stores.....	800	<	<	<	100	<	0	0.0	700	<
Gasoline service stations.....	100	<	0	0.0	0	0.0	0	0.0	100	<
Boat dealers.....	100	<	0	0.0	0	0.0	0	0.0	100	<
Recreational vehicle dealers.....	100	<	0	0.0	0	0.0	0	0.0	100	<
Automotive dealers, n.e.c.....	<	<	0	0.0	0	0.0	0	0.0	<	<

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Apparel and accessory stores.....</b>	1,700	<	200	0.1	700	0.1	100	<	700	<
Men's and boys' clothing stores.....	100	<	0	0.0	100	<	0	0.0	<	<
Women's clothing stores.....	500	<	<	<	300	<	0	0.0	100	<
Women's accessory and specialty stores.....	100	<	0	0.0	<	<	100	<	0	0.0
Children's and infants' wear stores.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Family clothing stores.....	600	<	100	<	100	<	0	0.0	400	<
Shoe stores.....	300	<	<	<	100	<	0	0.0	200	<
Misc. apparel and accessory stores.....	100	<	0	0.0	100	<	0	0.0	0	0.0
<b>Furniture and homefurnishings stores.....</b>	14,000	0.3	700	0.2	2,000	0.2	3,800	0.2	7,500	0.4
Furniture and homefurnishings stores.....	700	<	100	<	100	<	<	<	500	<
Household appliance stores.....	200	<	0	0.0	100	<	0	0.0	100	<
Radio, television, and computer stores.....	13,200	0.3	600	0.2	1,800	0.2	3,800	0.2	6,900	0.4
<b>Eating and drinking places.....</b>	700	<	0	0.0	700	0.1	0	0.0	0	0.0
<b>Misc. retail stores.....</b>	8,500	0.2	900	0.3	2,900	0.3	800	<	3,900	0.2
Drug stores and proprietary stores.....	900	<	100	<	400	<	100	<	300	<
Used merchandise stores.....	100	<	0	0.0	<	<	0	0.0	100	<
Miscellaneous shopping goods stores.....	1,400	<	200	0.1	500	<	0	0.0	700	<
Nonstore retailers.....	4,900	0.1	400	0.1	1,700	0.2	500	<	2,400	0.1
Fuel dealers.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Retail stores, n.e.c.....	1,100	<	100	<	300	<	200	<	600	<
<b>Finance, insurance, and real estate.....</b>	257,400	5.5	23,400	7.5	148,900	14.4	27,600	1.7	57,500	3.3
<b>Depository institutions.....</b>	50,500	1.1	5,500	1.8	31,400	3.0	5,300	0.3	8,300	0.5
Central reserve depositories.....	1,800	<	200	<	1,100	0.1	100	<	400	<
Commercial banks.....	37,900	0.8	3,600	1.2	23,600	2.3	4,700	0.3	5,900	0.3
Savings institutions.....	4,500	0.1	400	0.1	3,300	0.3	300	<	600	<
Credit unions.....	1,900	<	400	0.1	1,100	0.1	100	<	400	<
Foreign banks and branches and agencies.....	800	<	100	<	500	<	<	<	200	<
Functions closely related to banking.....	3,700	0.1	900	0.3	1,900	0.2	100	<	800	<
<b>Nondepository institutions.....</b>	16,100	0.3	1,000	0.3	9,500	0.9	1,700	0.1	3,800	0.2
Federal and federally sponsored credit.....	1,000	<	0	0.0	800	0.1	0	0.0	200	<
Personal credit institutions.....	4,700	0.1	200	0.1	3,100	0.3	100	<	1,200	0.1
Business credit institutions.....	4,700	0.1	400	0.1	2,300	0.2	700	<	1,300	0.1
Mortgage bankers and brokers.....	5,700	0.1	400	0.1	3,300	0.3	1,000	0.1	1,100	0.1
<b>Security and commodity brokers.....</b>	37,200	0.8	2,700	0.9	22,300	2.2	2,200	0.1	9,900	0.6
Security brokers and dealers.....	23,400	0.5	1,400	0.4	15,800	1.5	800	0.1	5,400	0.3
Commodity contracts, brokers, and dealers.....	800	<	0	0.0	300	<	0	0.0	400	<
Security and commodity exchanges.....	600	<	100	<	400	<	100	<	0	0.0
Security and commodity services.....	12,400	0.3	1,200	0.4	5,800	0.6	1,300	0.1	4,100	0.2

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Insurance carriers.....</b>	109,100	2.3	9,200	2.9	67,500	6.5	8,700	0.5	23,700	1.4
Life insurance.....	44,300	0.9	4,900	1.6	27,600	2.7	4,200	0.3	7,600	0.4
Medical service and health insurance.....	25,900	0.6	1,700	0.5	15,600	1.5	1,400	0.1	7,200	0.4
Fire, marine, and casualty insurance.....	34,000	0.7	2,300	0.7	21,700	2.1	2,900	0.2	7,200	0.4
Surety insurance.....	1,200	<	100	<	500	<	200	<	600	<
Title insurance.....	900	<	0	0.0	500	<	100	<	300	<
Pension, health, and welfare funds.....	2,700	0.1	200	0.1	1,600	0.2	100	<	800	<
Insurance carriers, n.e.c.....	100	<	0	0.0	100	<	0	0.0	0	0.0
<b>Insurance agents, brokers, and service.....</b>	21,100	0.4	1,500	0.5	9,300	0.9	4,400	0.3	5,900	0.3
<b>Real estate.....</b>	6,900	0.1	800	0.3	1,400	0.1	2,900	0.2	1,800	0.1
Real estate operators and lessors.....	1,700	<	200	0.1	200	<	700	<	500	<
Real estate agents and managers.....	4,100	0.1	500	0.1	1,000	0.1	1,800	0.1	800	<
Title abstract offices.....	200	<	0	0.0	100	<	0	0.0	100	<
Subdividers and developers.....	1,000	<	100	<	100	<	400	<	400	<
<b>Holding and other investment offices.....</b>	16,600	0.4	2,600	0.8	7,600	0.7	2,400	0.1	4,100	0.2
Holding offices.....	11,800	0.3	2,200	0.7	5,200	0.5	1,600	0.1	2,700	0.2
Investment offices.....	1,200	<	100	<	800	0.1	200	<	100	<
Trusts.....	2,000	<	100	<	900	0.1	200	<	900	<
Misc. investing.....	1,700	<	200	0.1	700	0.1	400	<	400	<
<b>Services.....</b>	2,147,000	45.7	121,500	38.8	605,500	58.4	572,400	35.5	847,600	48.9
<b>    Hotels and other lodging places.....</b>	8,800	0.2	100	<	600	0.1	6,200	0.4	1,900	0.1
<b>    Personal services.....</b>	1,200	<	0	0.0	400	<	400	<	500	<
Laundry, cleaning, and garment services.....	800	<	0	0.0	100	<	400	<	300	<
Photographic studios, portrait.....	100	<	0	0.0	100	<	0	0.0	100	<
Misc. personal services.....	300	<	0	0.0	200	<	0	0.0	100	<
<b>    Business services.....</b>	914,800	19.5	43,400	13.9	234,400	22.6	232,800	14.4	404,200	23.3
Advertising.....	6,600	0.1	700	0.2	3,100	0.3	1,000	0.1	1,700	0.1
Credit reporting and collection.....	1,600	<	200	0.1	500	0.1	100	<	800	<
Mailing, reproduction, and stenographic.....	8,200	0.2	600	0.2	1,200	0.1	600	<	5,800	0.3
Services to buildings.....	900	<	0	0.0	200	<	400	<	300	<
Misc. equipment rental and leasing.....	2,700	0.1	100	<	300	<	800	<	1,500	0.1
Personnel supply services.....	145,500	3.1	1,400	0.5	21,400	2.1	38,400	2.4	84,400	4.9
Computer and data processing services.....	699,300	14.9	38,600	12.3	199,700	19.3	182,100	11.3	278,900	16.1
Misc. business services.....	50,100	1.1	1,800	0.6	8,000	0.8	9,400	0.6	30,800	1.8

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Auto repair, services, and parking.....</b>	2,500	0.1	200	0.1	500	<	200	<	1,700	0.1
Automobile rentals, no drivers.....	1,800	<	100	<	400	<	100	<	1,300	0.1
Automobile parking.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Automobile repair shops.....	300	<	<	<	<	<	100	<	200	<
Automobile services, except repair.....	300	<	0	0.0	100	<	<	<	200	<
<b>Misc. repair services.....</b>	5,400	0.1	300	0.1	200	<	2,000	0.1	3,000	0.2
Electrical repair shops.....	2,900	0.1	100	<	200	<	1,000	0.1	1,700	0.1
Misc. repair shops.....	2,500	0.1	200	0.1	<	<	1,000	0.1	1,300	0.1
<b>Motion pictures.....</b>	11,700	0.2	200	0.1	1,000	0.1	1,500	0.1	9,000	0.5
Motion picture production and services.....	10,000	0.2	100	<	600	0.1	1,500	0.1	7,800	0.5
Motion picture distribution and services.....	1,300	<	0	0.0	200	<	0	0.0	1,100	0.1
Motion picture theaters.....	200	<	0	0.0	200	<	0	0.0	<	<
Video tape rental.....	200	<	100	<	100	<	0	0.0	0	0.0
<b>Amusement and recreation services.....</b>	7,200	0.2	0	0.0	500	0.1	2,200	0.1	4,500	0.3
Producers, orchestras, and entertainers.....	1,600	<	0	0.0	100	<	100	<	1,300	0.1
Commercial sports.....	1,100	<	0	0.0	200	<	200	<	800	<
Misc. amusement, recreation services.....	4,500	0.1	0	0.0	300	<	1,900	0.1	2,400	0.1
<b>Health services.....</b>	101,700	2.2	9,100	2.9	68,100	6.6	7,800	0.5	16,700	1.0
Offices and clinics of medical doctors.....	9,900	0.2	900	0.3	6,900	0.7	700	<	1,400	0.1
Offices and clinics of dentists.....	100	<	100	<	<	<	0	0.0	0	0.0
Offices of osteopathic physicians.....	<	<	0	0.0	<	<	0	0.0	0	0.0
Offices of other health practitioners.....	9,800	0.2	100	<	9,700	0.9	0	0.0	100	<
Nursing and personal care facilities.....	1,400	<	400	0.1	800	0.1	100	<	100	<
Hospitals.....	66,500	1.4	6,400	2.1	41,000	4.0	6,400	0.4	12,700	0.7
Medical and dental laboratories.....	5,500	0.1	600	0.2	3,200	0.3	400	<	1,300	0.1
Home health care services.....	700	<	200	0.1	400	<	0	0.0	100	<
Health and allied services, n.e.c.....	7,800	0.2	500	0.2	6,200	0.6	200	<	1,000	0.1
<b>Legal services.....</b>	2,300	<	300	0.1	1,300	0.1	200	<	500	<
<b>Educational services.....</b>	98,900	2.1	7,200	2.3	68,600	6.6	2,800	0.2	20,300	1.2
Elementary and secondary schools.....	34,800	0.7	700	0.2	31,500	3.0	1,000	0.1	1,700	0.1
Colleges, universities, and professional.....	60,200	1.3	6,100	1.9	35,500	3.4	1,100	0.1	17,500	1.0
Libraries.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Vocational schools.....	1,800	<	200	0.1	500	<	500	<	600	<
Schools and educational services, n.e.c.....	2,000	<	300	0.1	1,000	0.1	300	<	600	<

See explanatory information and SOURCE at end of table.

[Filled positions]

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Detailed industry	Total SET personnel		SET personnel managers		Scientists		Engineers		Technicians	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Social services.....</b>	13,000	0.3	500	0.2	10,900	1.1	400	<	1,100	0.1
Individual and family services.....	5,700	0.1	200	<	5,200	0.5	0	0.0	400	<
Job training and related services.....	1,500	<	100	<	800	0.1	400	<	200	<
Child day care services.....	200	<	0	0.0	200	<	0	0.0	0	0.0
Residential care.....	3,600	0.1	200	<	3,200	0.3	0	0.0	200	<
Social services, n.e.c.....	2,100	<	200	0.1	1,500	0.1	100	<	300	<
<b>Museums, botanical, zoological gardens.....</b>	1,700	<	300	0.1	700	0.1	100	<	600	<
Museums and art galleries.....	1,000	<	200	0.1	500	<	100	<	300	<
Botanical and zoological gardens.....	700	<	100	<	300	<	<	<	300	<
<b>Membership organizations.....</b>	9,500	0.2	1,000	0.3	5,500	0.5	800	0.1	2,200	0.1
Business associations.....	3,000	0.1	400	0.1	1,700	0.2	400	<	600	<
Professional organizations.....	1,900	<	200	0.1	1,300	0.1	100	<	300	<
Labor organizations.....	300	<	0	0.0	100	<	0	0.0	100	<
Civic and social associations.....	2,600	0.1	300	0.1	1,200	0.1	300	<	800	<
Political organizations.....	100	<	0	0.0	100	<	0	0.0	0	0.0
Religious organizations.....	600	<	100	<	400	<	100	<	200	<
Membership organizations, n.e.c.....	1,000	<	100	<	800	0.1	0	0.0	100	<
<b>Engineering and management services.....</b>	955,100	20.3	58,300	18.6	205,800	19.9	313,300	19.4	377,700	21.8
Engineering and architectural services.....	533,500	11.4	30,100	9.6	37,400	3.6	210,200	13.0	255,800	14.8
Accounting, auditing, and bookkeeping.....	15,800	0.3	1,000	0.3	8,800	0.9	1,700	0.1	4,200	0.2
Research and testing services.....	244,700	5.2	16,600	5.3	99,500	9.6	55,300	3.4	73,300	4.2
Management and public relations.....	161,100	3.4	10,600	3.4	60,000	5.8	46,100	2.9	44,400	2.6
<b>Services, n.e.c.....</b>	13,200	0.3	600	0.2	7,000	0.7	1,600	0.1	3,900	0.2

**NOTE:** Because of rounding, components may not add to totals.

**KEY:** < = The estimated actual value is less than 50 for numbers and less than 0.05 for percentages.

0 = Data were collected and the reported number or value was zero.

n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/  
Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-2. Employed scientists, by broad industry group of employment  
and detailed occupation: 1998**

Page 1 of 3

Broad industry group of employment	Total scientists	Physical scientists	Math scientists	Life scientists	Social scientists	Computer scientists
<b>Total.....</b>	1,036,500	136,400	104,500	78,500	144,000	573,100
<b>Agriculture, forestry, and fishing.....</b>	700	0	0	500	0	200
Agricultural services.....	700	0	0	500	0	200
<b>Mining.....</b>	13,200	9,200	400	100	200	3,300
Metal mining.....	1,000	800	0	0	0	100
Coal mining.....	300	200	0	<	0	100
Oil and gas extraction.....	11,400	7,900	400	<	200	2,900
Nonmetallic minerals, except fuels.....	600	300	0	0	<	200
<b>Construction.....</b>	1,500	100	0	0	0	1,300
General building contractors.....	300	0	0	0	0	300
Heavy construction, excluding building.....	300	100	0	0	0	200
Special trade contractors.....	800	0	0	0	0	800
<b>Manufacturing.....</b>	176,700	56,900	8,800	21,200	3,000	86,700
Food and kindred products.....	5,400	2,500	<	700	<	2,200
Tobacco products.....	2,800	800	0	100	0	2,000
Textile mill products.....	1,500	500	0	0	0	1,000
Apparel and other textile products.....	1,100	<	0	0	0	1,100
Lumber and wood products.....	2,800	0	100	1,600	0	1,200
Furniture and fixtures.....	900	0	0	0	0	900
Paper and allied products.....	3,900	1,100	0	600	0	2,200
Printing and publishing.....	8,900	100	300	0	300	8,100
Chemicals and allied products.....	64,100	39,100	600	16,200	200	8,200
Petroleum and coal products.....	2,300	1,300	100	0	100	900
Rubber and misc. plastics products.....	2,900	1,200	0	100	100	1,500
Leather and leather products.....	300	0	0	0	0	300
Stone, clay and glass products.....	1,700	400	0	0	0	1,400
Primary metal industries.....	4,800	1,600	0	100	200	3,000
Fabricated metal products.....	2,500	200	0	0	<	2,200
Industrial machinery and equipment.....	13,700	500	1,400	0	500	11,300
Electronic & other electric equipment.....	18,100	1,100	1,400	<	1,200	14,400
Transportation equipment.....	23,200	900	4,100	100	300	17,900
Instruments and related products.....	15,100	5,700	900	1,900	200	6,500
Miscellaneous manufacturing industries.....	900	100	0	0	0	800

See explanatory information and SOURCE at end of table.

## [Filled positions]

Page 2 of 3

Broad industry group of employment	Total scientists	Physical scientists	Math scientists	Life scientists	Social scientists	Computer scientists
<b>Transportation, communications, and public utilities.....</b>	46,800	4,200	3,200	600	2,800	36,100
Railroad transportation.....	900	0	400	0	0	500
Local and interurban transit.....	300	0	0	0	0	300
Trucking and warehousing.....	2,100	0	0	0	100	2,000
Water transportation.....	500	100	0	0	0	400
Transportation by air.....	5,700	100	1,500	0	300	3,800
Pipelines, except natural gas.....	300	<	0	0	0	200
Transportation services.....	900	<	0	0	0	900
Communications.....	23,200	200	1,100	0	1,600	20,300
Utilities and sanitary services.....	12,900	3,700	200	600	800	7,700
<b>Wholesale trade.....</b>	32,100	3,300	400	1,700	800	25,800
Wholesale trade, durable goods.....	23,600	600	300	400	600	21,700
Wholesale trade, nondurable goods.....	8,500	2,700	100	1,300	200	4,100
<b>Retail trade.....</b>	11,000	<	100	0	100	10,900
Building materials and garden supplies.....	800	<	0	0	<	700
General merchandise stores.....	2,800	0	0	0	0	2,800
Food stores.....	900	0	0	0	0	900
Automotive dealers and service stations.....	300	0	0	0	0	300
Apparel and accessory stores.....	700	0	0	0	0	700
Furniture and homefurnishings stores.....	2,000	0	0	0	0	2,000
Eating and drinking places.....	700	0	0	0	0	700
Misc. retail stores.....	2,900	0	100	0	100	2,800
<b>Finance, insurance, and real estate.....</b>	148,900	400	33,900	200	12,700	101,700
Depository institutions.....	31,400	0	6,400	0	4,500	20,500
Nondepository institutions.....	9,500	0	1,400	0	1,000	7,000
Security and commodity brokers.....	22,300	0	7,300	0	4,400	10,600
Insurance carriers.....	67,500	0	16,300	0	1,500	49,700
Insurance agents, brokers, and service.....	9,300	0	1,700	0	100	7,500
Real estate.....	1,400	0	100	0	300	1,000
Holding and other investment offices.....	7,600	400	700	200	900	5,400

See explanatory information and SOURCE at end of table.

[Filled positions]

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Broad industry group of employment	Total scientists	Physical scientists	Math scientists	Life scientists	Social scientists	Computer scientists
<b>Services.....</b>	605,500	62,200	57,600	54,300	124,400	307,100
Hotels and other lodging places.....	600	0	<0	0	0	600
Personal services.....	400	0	0	0	0	400
Business services.....	234,400	5,300	18,800	400	6,800	203,200
Auto repair, services, and parking.....	500	0	0	0	0	500
Misc. repair services.....	200	0	0	0	0	200
Motion pictures.....	1,000	0	0	100	100	900
Amusement and recreation services.....	500	0	0	0	0	500
Health services.....	68,100	1,100	2,200	11,800	31,200	21,900
Legal services.....	1,300	0	200	0	200	1,000
Educational services.....	68,600	700	3,100	2,000	39,900	22,900
Social services.....	10,900	0	100	100	9,500	1,200
Museums, botanical, zoological gardens.....	700	100	0	300	100	300
Membership organizations.....	5,500	200	900	700	1,400	2,400
Engineering and management services.....	205,800	51,000	30,100	38,800	35,000	51,000
Services, n.e.c.....	7,000	3,800	2,300	300	400	300

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- < = The estimated actual value is less than 50.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/  
Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-3. Employed engineers, by broad industry group of employment  
and detailed occupation: 1998**

[Filled positions]

Page 1 of 3

Broad industry group of employment	Engineers								
	Total	Aeronau- tical	Civil	Electrical/ electronics	Computer	Mechan- ical	Indus- trial	Sales	Other
<b>Total.....</b>	1,614,300	43,600	107,600	289,500	293,200	203,900	108,200	74,900	493,500
<b>Agriculture, forestry, and fishing.....</b>	100	0	0	0	0	0	0	0	100
Agricultural services.....	100	0	0	0	0	0	0	0	100
<b>Mining.....</b>	17,800	0	600	200	300	300	800	600	14,900
Metal mining.....	1,500	0	0	0	0	<	200	0	1,300
Coal mining.....	1,300	0	100	0	0	100	<	0	1,100
Oil and gas extraction.....	14,200	0	600	200	300	200	600	600	11,700
Nonmetallic minerals, except fuels.....	800	0	0	0	0	<	0	0	700
<b>Construction.....</b>	41,100	0	12,500	6,600	200	5,300	1,500	5,400	9,600
General building contractors.....	10,300	0	4,900	500	0	800	500	200	3,400
Heavy construction, excluding building.....	17,400	0	7,000	1,400	200	3,400	700	200	4,500
Special trade contractors.....	13,500	0	600	4,700	100	1,100	200	5,100	1,700
<b>Manufacturing.....</b>	774,000	32,000	2,700	147,000	81,000	127,600	86,500	32,900	264,300
Food and kindred products.....	5,400	0	0	0	0	2,000	1,800	<	1,600
Tobacco products.....	800	0	0	0	0	200	300	0	300
Textile mill products.....	3,000	0	0	0	0	800	1,200	300	800
Apparel and other textile products.....	1,800	0	0	0	0	300	900	<	600
Lumber and wood products.....	2,300	0	0	0	0	800	600	300	700
Furniture and fixtures.....	4,000	0	0	0	0	1,100	1,200	200	1,600
Paper and allied products.....	10,200	0	0	900	300	1,900	1,700	100	5,300
Printing and publishing.....	3,000	0	0	<	100	300	800	300	1,500
Chemicals and allied products.....	43,400	0	500	1,700	800	4,600	2,500	1,700	31,600
Petroleum and coal products.....	6,100	0	200	200	100	600	600	200	4,200
Rubber and misc. plastics products.....	17,900	0	0	900	500	5,600	3,600	1,200	6,200
Leather and leather products.....	200	0	0	0	0	0	<	0	200
Stone, clay and glass products.....	7,700	0	400	400	300	1,500	1,400	700	3,000
Primary metal industries.....	20,000	0	0	1,500	800	3,500	3,300	1,200	9,800
Fabricated metal products.....	31,300	0	1,000	1,100	600	11,300	5,100	2,800	9,400
Industrial machinery and equipment.....	173,200	0	400	36,600	31,100	38,400	15,200	13,500	38,200
Electronic & other electric equipment.....	163,600	0	0	65,000	22,000	15,000	14,000	5,600	42,000
Transportation equipment.....	168,900	31,400	200	5,500	6,700	24,800	22,800	1,300	76,200
Instruments and related products.....	108,000	600	0	33,200	17,800	14,100	8,900	3,600	29,900
Miscellaneous manufacturing industries.....	3,100	0	0	0	0	900	800	0	1,400

See explanatory information and SOURCE at end of table.

[Filled positions]

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Broad industry group of employment	Engineers								
	Total	Aeronau-tical	Civil	Electrical/ electronics	Computer	Mechan- ical	Indus- trial	Sales	Other
<b>Transportation, communications, and public utilities.....</b>	97,400	1,100	4,400	34,200	13,300	3,400	3,800	400	36,800
Railroad transportation.....	1,700	0	800	400	0	0	0	0	500
Trucking and warehousing.....	800	0	0	0	0	0	0	0	800
Water transportation.....	2,300	0	0	0	0	100	0	0	2,200
Transportation by air.....	5,200	1,100	0	300	700	0	1,200	0	2,000
Pipelines, except natural gas.....	600	0	200	100	0	100	0	0	200
Transportation services.....	200	0	0	0	0	0	0	0	200
Communications.....	47,500	0	500	19,000	11,400	400	500	400	15,400
Utilities and sanitary services.....	39,100	0	3,000	14,400	1,200	2,800	2,100	<	15,500
<b>Wholesale trade.....</b>	76,700	0	0	17,500	6,000	7,400	600	23,700	21,700
Wholesale trade, durable goods.....	71,300	0	0	17,100	5,800	7,000	600	22,200	18,600
Wholesale trade, nondurable goods.....	5,400	0	0	300	100	400	0	1,500	3,100
<b>Retail trade.....</b>	7,300	0	0	500	900	100	0	1,700	4,100
Building materials and garden supplies.....	900	0	0	0	0	0	0	100	800
General merchandise stores.....	800	0	0	0	0	0	0	0	800
Food stores.....	900	0	0	0	0	0	0	300	500
Apparel and accessory stores.....	100	0	0	0	0	0	0	100	0
Furniture and homefurnishings stores.....	3,800	0	0	300	900	0	0	1,100	1,400
Misc. retail stores.....	800	0	0	100	0	100	0	0	600
<b>Finance, insurance, and real estate.....</b>	27,600	0	400	300	15,600	1,000	700	0	9,600
Depository institutions.....	5,300	0	0	100	4,600	0	200	0	400
Nondepository institutions.....	1,700	0	0	0	1,100	0	0	0	600
Security and commodity brokers.....	2,200	0	0	100	1,700	0	0	0	500
Insurance carriers.....	8,700	0	100	0	6,300	100	0	0	2,200
Insurance agents, brokers, and service.....	4,400	0	<	0	900	0	<	0	3,400
Real estate.....	2,900	0	300	0	200	900	0	0	1,400
Holding and other investment offices.....	2,400	0	0	100	800	0	500	0	1,000

See explanatory information and SOURCE at end of table.

[Filled positions]

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Broad industry group of employment	Engineers								
	Total	Aeronau- tical	Civil	Electrical/ electronics	Computer	Mechan- ical	Indus- trial	Sales	Other
<b>Services.....</b>	572,400	10,500	86,900	83,300	176,000	58,800	14,300	10,300	132,300
Hotels and other lodging places.....	6,200	0	0	800	100	1,900	0	0	3,400
Personal services.....	400	0	0	0	0	0	0	0	400
Business services.....	232,800	6,500	0	25,700	143,400	8,700	6,000	7,300	35,200
Auto repair, services, and parking.....	200	0	0	0	0	0	0	0	200
Misc. repair services.....	2,000	0	0	300	100	<	100	<	1,400
Motion pictures.....	1,500	0	0	700	0	0	0	0	800
Amusement and recreation services.....	2,200	0	0	300	0	0	0	0	1,800
Health services.....	7,800	0	0	400	2,100	1,700	400	0	3,200
Legal services.....	200	0	0	0	200	0	0	0	0
Educational services.....	2,800	0	0	0	300	0	0	0	2,600
Social services.....	400	0	0	0	0	0	0	0	400
Museums, botanical, zoological gardens....	100	0	0	0	0	0	0	0	100
Membership organizations.....	800	0	<	0	0	0	0	0	800
Engineering and management services.....	313,300	4,000	86,500	54,900	29,700	46,400	7,800	3,000	81,000
Services, n.e.c.....	1,600	0	300	100	200	100	0	0	1,000

**NOTE:** Because of rounding, components may not add to totals.

**KEY:** < = The estimated actual value is less than 50.  
 0 = Data were collected and the reported number or value was zero.  
 n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/  
 Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-4. Employed technicians, by broad industry group of employment  
and detailed occupation: 1998**

[Filled positions]

Page 1 of 3

Broad industry group of employment	Total	Computer programmers	Drafters	Science <sup>1</sup>	Engineering technicians				
					Total	Electrical/ electronic	Mechanical	Civil	Other
<b>Total.....</b>	1,734,200	551,700	254,000	172,700	755,800	278,100	77,800	44,000	355,900
<b>Agriculture, forestry, and fishing.....</b>	2,900	100	1,600	1,100	100	0	0	0	100
Agricultural services.....	2,900	100	1,600	1,100	100	0	0	0	100
<b>Mining.....</b>	15,800	1,500	1,000	7,700	5,600	800	400	200	4,300
Metal mining.....	1,600	100	0	600	900	0	0	0	900
Coal mining.....	1,100	100	100	200	700	0	0	100	600
Oil and gas extraction.....	12,300	1,300	800	6,300	3,900	800	400	100	2,600
Nonmetallic minerals, except fuels.....	800	<	0	600	200	0	0	0	200
<b>Construction.....</b>	43,400	1,000	17,400	300	24,800	15,200	1,100	2,100	6,300
General building contractors.....	8,700	300	5,900	0	2,500	200	400	700	1,200
Heavy construction, excluding building.....	7,900	300	2,000	100	5,400	700	500	1,200	3,000
Special trade contractors.....	26,700	400	9,400	100	16,800	14,300	200	200	2,100
<b>Manufacturing.....</b>	488,400	60,200	76,700	88,700	262,800	99,700	42,300	1,100	119,700
Food and kindred products.....	17,700	1,400	0	13,400	2,900	0	500	0	2,400
Tobacco products.....	1,200	200	0	200	800	0	0	0	800
Textile mill products.....	4,200	600	0	1,600	2,000	<	100	0	1,800
Apparel and other textile products.....	1,500	600	0	100	900	0	100	0	800
Lumber and wood products.....	5,700	400	4,000	100	1,200	0	200	0	1,000
Furniture and fixtures.....	5,800	900	3,300	0	1,600	0	300	0	1,300
Paper and allied products.....	6,800	600	500	1,800	3,800	1,100	400	0	2,300
Printing and publishing.....	10,000	6,600	1,200	100	2,300	300	300	0	1,700
Chemicals and allied products.....	62,100	1,700	1,300	47,100	12,000	1,800	1,200	0	9,100
Petroleum and coal products.....	5,200	200	200	3,300	1,500	300	100	0	1,100
Rubber and misc. plastics products.....	14,400	900	2,100	3,400	8,000	1,000	2,100	0	4,900
Leather and leather products.....	400	<	0	200	200	0	0	0	200
Stone, clay and glass products.....	6,400	400	1,900	1,000	3,000	500	400	100	2,100
Primary metal industries.....	11,300	900	1,500	3,200	5,700	1,600	800	0	3,300
Fabricated metal products.....	26,000	3,400	13,500	400	8,700	1,600	2,200	0	4,900
Industrial machinery and equipment.....	92,800	24,200	22,300	3,500	42,800	18,700	10,000	<	14,100
Electronic & other electric equipment.....	90,900	8,100	10,200	4,500	68,200	43,300	4,800	400	19,800
Transportation equipment.....	61,300	2,700	7,200	1,000	50,400	3,300	11,900	500	34,800
Instruments and related products.....	60,900	5,900	6,100	3,600	45,300	26,400	6,500	0	12,400
Miscellaneous manufacturing industries.....	4,000	600	1,600	100	1,700	0	500	0	1,100

See explanatory information and SOURCE at end of table.

Broad industry group of employment	Total	Computer programmers	Drafters	Science <sup>1</sup>	Engineering technicians				
					Total	Electrical/ electronic	Mechanical	Civil	Other
<b>Transportation, communications, and public utilities.....</b>									
public utilities.....	131,800	28,800	11,900	6,800	84,400	27,500	2,200	2,000	52,700
Railroad transportation.....	3,100	800	< 0	0	2,300	300	< 0	200	1,700
Local and interurban transit.....	100	100	0	0	< 0	0	0	0	< 0
Trucking and warehousing.....	2,000	1,700	0	0	300	0	0	0	300
Water transportation.....	500	400	0	0	100	0	0	0	100
Transportation by air.....	4,600	2,700	0	0	2,000	800	0	0	1,200
Pipelines, except natural gas.....	1,000	100	100	100	700	300	200	100	200
Transportation services.....	1,600	1,300	0	100	100	0	0	0	100
Communications.....	77,900	18,500	3,100	0	56,300	18,200	600	400	37,100
Utilities and sanitary services.....	41,100	3,400	8,600	6,500	22,600	7,900	1,500	1,300	11,900
<b>Wholesale trade.....</b>									
Wholesale trade, durable goods.....	116,100	33,700	5,700	1,600	75,100	60,400	4,500	0	10,200
Wholesale trade, nondurable goods.....	13,200	5,800	300	3,400	3,900	2,300	300	0	1,300
<b>Retail trade.....</b>									
Retail trade.....	17,500	10,400	1,400	100	5,600	2,200	1,000	0	2,400
Building materials and garden supplies.....	1,300	200	900	< 200	0	0	0	0	200
General merchandise stores.....	1,200	1,100	0	0	100	0	0	0	100
Food stores.....	800	700	0	0	100	0	0	0	100
Automotive dealers and service stations.....	2,200	400	< 0	0	1,700	0	1,000	0	700
Apparel and accessory stores.....	700	700	0	0	100	0	0	0	100
Furniture and homefurnishings stores.....	7,500	4,500	300	0	2,700	1,800	0	0	900
Misc. retail stores.....	3,900	2,800	100	100	900	500	0	0	400
<b>Finance, insurance, and real estate.....</b>									
Finance, insurance, and real estate.....	57,500	52,000	900	2,000	2,600	0	0	0	2,600
Depository institutions.....	8,300	8,100	0	0	100	0	0	0	100
Nondepository institutions.....	3,800	3,700	0	100	100	0	0	0	100
Security and commodity brokers.....	9,900	9,600	0	0	300	0	0	0	300
Insurance carriers.....	23,700	22,200	100	600	800	0	0	0	800
Insurance agents, brokers, and service.....	5,900	5,600	0	100	200	0	0	0	200
Real estate.....	1,800	600	600	0	600	0	0	0	600
Holding and other investment offices.....	4,100	2,200	200	1,200	500	0	0	0	500

See explanatory information and SOURCE at end of table.

[Filled positions]

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Broad industry group of employment	Total	Computer programmers	Drafters	Science <sup>1</sup>	Engineering technicians				
					Total	Electrical/ electronic	Mechanical	Civil	Other
<b>Services.....</b>	847,600	358,400	137,300	61,100	290,900	69,900	25,900	38,700	156,400
Hotels and other lodging places.....	1,900	400	0	0	1,500	1,000	0	0	500
Personal services.....	500	200	0	0	200	0	0	0	200
Business services.....	404,200	283,100	35,700	8,300	77,000	36,000	5,100	0	35,900
Auto repair, services, and parking.....	1,700	1,300	0	0	300	0	0	0	300
Misc. repair services.....	3,000	300	300	200	2,300	800	0	0	1,400
Motion pictures.....	9,000	2,000	0	0	7,000	900	0	0	6,100
Amusement and recreation services.....	4,500	700	0	100	3,700	1,500	0	0	2,200
Health services.....	16,700	7,900	0	5,200	3,600	1,200	400	400	1,600
Legal services.....	500	500	0	0	0	0	0	0	0
Educational services.....	20,300	15,900	200	2,300	1,900	500	100	300	1,100
Social services.....	1,100	700	0	100	300	0	0	0	300
Museums, botanical, zoological gardens.....	600	100	0	400	100	0	0	0	100
Membership organizations.....	2,200	1,200	200	500	400	0	0	0	400
Engineering and management services.....	377,700	43,500	100,400	42,200	191,600	27,800	20,200	37,900	105,700
Services, n.e.c.....	3,900	600	500	1,800	1,000	300	100	200	500

<sup>1</sup>The classification "science technicians" includes biological, agricultural, and food technicians and technologists, except health; chemical technicians and technologists, except health; nuclear technicians and technologists; petroleum technicians and technologists; all other physical and life science technicians and technologists; and mathematical technicians.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- < = The estimated actual value is less than 50.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.1. Employed scientists, engineers, technicians (SETs), and SET managers, in SICs 07 and 10–17 (agricultural services, mining, and construction), and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Crop services (SIC 720)</b>			
<b>Scientific and technical personnel</b> .....	490	0.4	(nc)
<b>Scientists</b> .....	330	0.3	(nc)
Life scientists.....	270	0.2	(nc)
Agricultural scientists.....	230	0.2	11
All other life scientists.....	40	<	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Engineers</b> .....	50	<	(nc)
Other, n.e.c. ....	50	<	(nc)
<b>Technicians</b> .....	110	0.1	42
Physical and life science technicians.....	110	0.1	42
Biological science technician.....	110	0.1	42
<b>Veterinary services (SIC 740)</b>			
<b>Scientific and technical personnel</b> .....	30	<	(nc)
<b>Technicians</b> .....	30	<	(nc)
Physical and life science technicians.....	30	<	(nc)
All other physical and life science technicians.....	30	<	(nc)
<b>Animal services, except veterinary (SIC 750)</b>			
<b>Scientific and technical personnel</b> .....	970	1.8	(nc)
<b>Scientists</b> .....	190	0.4	(nc)
Life scientists.....	60	0.1	23
Agricultural scientists.....	60	0.1	23
Computer analysts.....	130	0.2	(nc)
<b>Technicians</b> .....	780	1.5	(nc)
Computer programmer.....	50	0.1	6
Physical and life science technicians.....	730	1.4	11
Biological science technician.....	730	1.4	11
<b>Farm labor and management services (SIC 760)</b>			
<b>Scientific and technical personnel</b> .....	190	0.1	(nc)
<b>Scientists</b> .....	190	0.1	(nc)
Life scientists.....	150	0.1	(nc)
All other life scientists.....	150	0.1	(nc)
Computer analysts.....	40	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Landscape and horticultural services (SIC 780)</b>			
Scientific and technical personnel.....	2,110	0.4	(nc)
<b>Scientists</b> .....	30	<	37
Life scientists.....	30	<	37
Agricultural scientists.....	30	<	37
<b>Engineers</b> .....	60	<	(nc)
Other, n.e.c.....	60	<	(nc)
<b>Technicians</b> .....	2,020	0.4	(nc)
Drafter.....	1,640	0.3	10
Surveyor.....	50	<	17
All other engineering technicians.....	60	<	(nc)
Physical and life science technicians.....	270	0.1	41
Biological science technician.....	270	0.1	41
<b>Iron ores (SIC 1010)</b>			
Scientific and technical personnel.....	440	5.3	(nc)
<b>Scientists</b> .....	30	0.4	(nc)
Physical scientists.....	30	0.4	(nc)
All other physical scientists.....	30	0.4	(nc)
<b>Engineers</b> .....	200	2.4	(nc)
Other, n.e.c.....	200	2.4	(nc)
<b>Technicians</b> .....	210	2.5	(nc)
All other engineering technicians.....	210	2.5	(nc)
<b>Copper ores (SIC 1020)</b>			
Scientific and technical personnel.....	1,320	9.4	(nc)
<b>Scientists</b> .....	180	1.3	(nc)
Physical scientists.....	140	1	(nc)
Geologists, geophysicists, and earth scientists.....	100	0.7	20
All other physical scientists.....	40	0.3	(nc)
Computer analysts.....	40	0.3	(nc)
<b>Engineers</b> .....	720	5.1	(nc)
Industrial.....	160	1.1	0
Mechanical.....	40	0.3	0
Metallurgical/metallurgists.....	120	0.9	1
Other, n.e.c.....	400	2.8	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Copper ores (SIC 1020) -- continued:</b>			
<b>Technicians.....</b>	420	3	(nc)
Computer programmer.....	100	0.7	0
All other engineering technicians.....	230	1.6	(nc)
Physical and life science technicians.....	90	0.6	1
Chemical technicians, except health.....	90	0.6	1
<b>Lead and zinc ores (SIC 1030)</b>			
<b>Scientific and technical personnel.....</b>	60	2.7	(nc)
<b>Engineers.....</b>	60	2.7	(nc)
Other, n.e.c.....	60	2.7	(nc)
<b>Gold and silver ores (SIC 1040)</b>			
<b>Scientific and technical personnel.....</b>	1,880	12.3	(nc)
<b>Scientists.....</b>	540	3.6	(nc)
Physical scientists.....	470	3.1	(nc)
Geologists, geophysicists, and earth scientists.....	430	2.8	9
All other physical scientists.....	40	0.3	(nc)
Computer analysts.....	70	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	70	0.5	12
<b>Engineers.....</b>	470	3.1	(nc)
Metallurgical/metallurgists.....	120	0.8	7
Other, n.e.c.....	350	2.3	(nc)
<b>Technicians.....</b>	800	5.3	(nc)
Surveyor.....	160	1.1	(nc)
All other engineering technicians.....	190	1.3	(nc)
Physical and life science technicians.....	450	3	(nc)
Chemical technicians, except health.....	310	2	5
All other physical and life science technicians.....	140	0.9	14
<b>Metal mining services (SIC 1080)</b>			
<b>Scientific and technical personnel.....</b>	180	6.5	(nc)
<b>Scientists.....</b>	140	5.1	8
Physical scientists.....	140	5.1	8
Geologists, geophysicists, and earth scientists.....	140	5.1	8
<b>Engineers.....</b>	40	1.5	(nc)
Other, n.e.c.....	40	1.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. metal ores, n.e.c. (SIC 1090)</b>			
<b>Scientific and technical personnel</b> .....	230	9.5	(nc)
<b>Scientists</b> .....	60	2.5	(nc)
Physical scientists.....	60	2.5	(nc)
All other physical scientists.....	60	2.5	(nc)
<b>Engineers</b> .....	40	1.7	0
Other, n.e.c.....	40	1.7	0
<b>Technicians</b> .....	130	5.4	(nc)
All other engineering technicians.....	70	2.9	(nc)
Physical and life science technicians.....	60	2.5	17
Chemical technicians, except health.....	60	2.5	17
<b>Bituminous coal and lignite mining (SIC 1220)</b>			
<b>Scientific and technical personnel</b> .....	2,940	3.5	(nc)
<b>Scientists</b> .....	320	0.4	(nc)
Physical scientists.....	210	0.3	(nc)
Chemists.....	60	0.1	7
Geologists, geophysicists, and earth scientists.....	100	0.1	12
All other physical scientists.....	50	0.1	9
Life scientists.....	40	0.1	13
Foresters and conservation scientists.....	40	0.1	13
Computer analysts.....	70	0.1	3
<b>Managers of scientific and technical personnel</b> .....	320	0.4	15
<b>Engineers</b> .....	1,240	1.5	(nc)
Civil.....	50	0.1	8
Industrial.....	30	<	3
Mechanical.....	70	0.1	4
Other, n.e.c.....	1,090	1.3	(nc)
<b>Technicians</b> .....	1,060	1.3	(nc)
Computer programmer.....	80	0.1	45
Drafter.....	130	0.2	4
Surveyor.....	460	0.5	(nc)
Civil engineering technician.....	50	0.1	9
All other engineering technicians.....	160	0.2	(nc)
Physical and life science technicians.....	180	0.2	(nc)
Chemical technicians, except health.....	150	0.2	5
All other physical and life science technicians.....	30	<	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Coal mining services (SIC 1240)</b>			
<b>Scientific and technical personnel.....</b>	30	0.6	(nc)
<b>Engineers.....</b>	30	0.6	(nc)
Other, n.e.c.....	30	0.6	(nc)
<b>Crude petroleum and natural gas (SIC 1310)</b>			
<b>Scientific and technical personnel.....</b>	27,890	20.3	(nc)
<b>Scientists.....</b>	9,190	6.7	(nc)
Operations and systems researchers and analysts.....	320	0.2	18
Physical scientists.....	6,180	4.5	(nc)
Chemists.....	360	0.3	2
Geologists, geophysicists, and earth scientists.....	5,220	3.8	4
All other physical scientists.....	600	0.4	(nc)
Life scientists.....	30	<	(nc)
All other life scientists.....	30	<	(nc)
Social scientists.....	190	0.1	(nc)
Economists.....	150	0.1	1
Urban and regional planners.....	40	<	0
Computer analysts.....	2,470	1.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,500	1.1	5
<b>Engineers.....</b>	9,900	7.2	(nc)
Chemical.....	360	0.3	8
Civil.....	540	0.4	2
Computer.....	100	0.1	0
Electrical/electronics.....	100	0.1	3
Industrial.....	510	0.4	4
Marine.....	40	<	21
Mechanical.....	170	0.1	4
Safety.....	280	0.2	7
Other, n.e.c.....	7,800	5.7	(nc)
<b>Technicians.....</b>	7,300	5.3	(nc)
Computer programmer.....	1,100	0.8	3
Drafter.....	540	0.4	4
Surveyor.....	260	0.2	(nc)
Electrical/electronics engineering technician.....	280	0.2	9
Mechanical engineering technicians.....	100	0.1	22
Civil engineering technician.....	90	0.1	5
All other engineering technicians.....	970	0.7	(nc)
Physical and life science technicians.....	3,960	2.9	(nc)
All other physical and life science technicians.....	3,960	2.9	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Natural gas liquids (SIC 1320)</b>			
Scientific and technical personnel.....	490	10.8	(nc)
<b>Scientists</b> .....	180	4	(nc)
Physical scientists.....	90	2	(nc)
All other physical scientists.....	90	2	(nc)
Computer analysts.....	90	2	(nc)
<b>Managers of scientific and technical personnel</b> .....	40	0.9	6
<b>Engineers</b> .....	150	3.3	(nc)
Other, n.e.c.....	150	3.3	(nc)
<b>Technicians</b> .....	120	2.7	(nc)
All other engineering technicians.....	60	1.3	(nc)
Physical and life science technicians.....	60	1.3	(nc)
All other physical and life science technicians.....	60	1.3	(nc)
<b>Oil and gas field services (SIC 1380)</b>			
Scientific and technical personnel.....	12,300	6.8	(nc)
<b>Scientists</b> .....	2,040	1.1	(nc)
Operations and systems researchers and analysts.....	110	0.1	24
Physical scientists.....	1,580	0.9	(nc)
Chemists.....	50	<	8
Geologists, geophysicists, and earth scientists.....	1,460	0.8	12
All other physical scientists.....	70	<	2
Social scientists.....	40	<	(nc)
All other social scientists.....	40	<	(nc)
Computer analysts.....	310	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,260	0.7	21
<b>Engineers</b> .....	4,130	2.3	(nc)
Civil.....	50	<	41
Computer.....	150	0.1	1
Electrical/electronics.....	120	0.1	27
Industrial.....	120	0.1	1
Safety.....	180	0.1	7
Sales.....	580	0.3	15
Other, n.e.c.....	2,930	1.6	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Oil and gas field services (SIC 1380) -- continued:</b>			
<b>Technicians.....</b>	4,870	2.7	(nc)
Computer programmer.....	150	0.1	26
Drafter.....	300	0.2	9
Surveyor.....	180	0.1	8
Electrical/electronics engineering technician.....	500	0.3	6
Mechanical engineering technicians.....	330	0.2	5
Civil engineering technician.....	40	<	11
All other engineering technicians.....	1,120	0.6	(nc)
Physical and life science technicians.....	2,250	1.2	(nc)
Chemical technicians, except health.....	60	<	12
All other physical and life science technicians.....	2,190	1.2	(nc)
<b>Crushed and broken stone (SIC 1420)</b>			
<b>Scientific and technical personnel.....</b>	760	1.8	(nc)
<b>Scientists.....</b>	160	0.4	(nc)
Physical scientists.....	110	0.3	(nc)
Geologists, geophysicists, and earth scientists.....	70	0.2	8
All other physical scientists.....	40	0.1	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	40	0.1	8
<b>Managers of scientific and technical personnel.....</b>	80	0.2	10
<b>Engineers.....</b>	280	0.7	(nc)
Other, n.e.c.....	280	0.7	(nc)
<b>Technicians.....</b>	240	0.6	(nc)
Computer programmer.....	40	0.1	7
All other engineering technicians.....	100	0.2	(nc)
Physical and life science technicians.....	100	0.2	10
Chemical technicians, except health.....	100	0.2	10
<b>Sand and gravel (SIC 1440)</b>			
<b>Scientific and technical personnel.....</b>	400	1.1	(nc)
<b>Scientists.....</b>	170	0.5	(nc)
Physical scientists.....	30	0.1	13
Geologists, geophysicists, and earth scientists.....	30	0.1	13
Computer analysts.....	140	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	40	0.1	9

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Engineers.....</b>	150	0.4	(nc)
Other, n.e.c.....	150	0.4	(nc)
<b>Technicians.....</b>	40	0.1	13
Physical and life science technicians.....	40	0.1	13
Chemical technicians, except health.....	40	0.1	13
<b>Clay, ceramic, and refractory minerals (SIC 1450)</b>			
<b>Scientific and technical personnel.....</b>	460	6.3	(nc)
<b>Scientists.....</b>	40	0.6	(nc)
Physical scientists.....	40	0.6	(nc)
Chemists.....	30	0.4	24
All other physical scientists.....	10	0.1	(nc)
<b>Engineers.....</b>	90	1.2	(nc)
Other, n.e.c.....	90	1.2	(nc)
<b>Technicians.....</b>	330	4.5	3
Physical and life science technicians.....	330	4.5	3
Chemical technicians, except health.....	330	4.5	3
<b>Chemical and fertilizer minerals (SIC 1470)</b>			
<b>Scientific and technical personnel.....</b>	480	4.2	(nc)
<b>Scientists.....</b>	30	0.3	(nc)
Computer analysts.....	30	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	60	0.5	7
<b>Engineers.....</b>	190	1.7	(nc)
Mechanical.....	40	0.4	0
Other, n.e.c.....	150	1.3	(nc)
<b>Technicians.....</b>	200	1.8	(nc)
All other engineering technicians.....	80	0.7	(nc)
Physical and life science technicians.....	120	1.1	7
Chemical technicians, except health.....	120	1.1	7

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Nonmetallic minerals services (SIC 1480)</b>			
<b>Scientific and technical personnel</b> .....	120	10.7	4
<b>Scientists</b> .....	120	10.7	4
Physical scientists.....	120	10.7	4
Geologists, geophysicists, and earth scientists.....	120	10.7	4
<b>Misc. nonmetallic minerals (SIC 1490)</b>			
<b>Scientific and technical personnel</b> .....	140	2.7	(nc)
<b>Scientists</b> .....	40	0.8	(nc)
Physical scientists.....	40	0.8	(nc)
All other physical scientists.....	40	0.8	(nc)
<b>Engineers</b> .....	70	1.3	(nc)
Other, n.e.c.....	70	1.3	(nc)
<b>Technicians</b> .....	30	0.6	8
Physical and life science technicians.....	30	0.6	8
Chemical technicians, except health.....	30	0.6	8
<b>Residential building construction (SIC 1520)</b>			
<b>Scientific and technical personnel</b> .....	5,240	0.7	(nc)
<b>Scientists</b> .....	60	<	7
Computer analysts.....	60	<	7
<b>Managers of scientific and technical personnel</b> .....	250	<	10
<b>Engineers</b> .....	1,260	0.2	(nc)
Civil.....	970	0.1	16
Safety.....	80	<	10
Other, n.e.c.....	210	<	(nc)
<b>Technicians</b> .....	3,670	0.5	(nc)
Computer programmer.....	80	<	15
Drafter.....	3,190	0.4	11
Surveyor.....	150	<	(nc)
Mechanical engineering technicians.....	40	<	5
Civil engineering technician.....	80	<	13
All other engineering technicians.....	130	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Operative builders (SIC 1530)</b>			
<b>Scientific and technical personnel</b> .....	640	2.3	(nc)
<b>Scientists</b> .....	130	0.5	(nc)
Computer analysts.....	130	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	100	0.4	22
<b>Engineers</b> .....	60	0.2	26
Civil.....	60	0.2	26
<b>Technicians</b> .....	350	1.2	(nc)
Computer programmer.....	70	0.3	19
Drafter.....	240	0.8	6
All other engineering technicians.....	40	0.1	(nc)
<b>Nonresidential building excluding building (SIC 1540)</b>			
<b>Scientific and technical personnel</b> .....	15,260	2.3	(nc)
<b>Scientists</b> .....	150	<	5
Computer analysts.....	150	<	5
<b>Managers of scientific and technical personnel</b> .....	1,450	0.2	3
<b>Engineers</b> .....	8,960	1.4	(nc)
Chemical.....	270	<	3
Civil.....	3,850	0.6	5
Electrical/electronics.....	480	0.1	11
Industrial.....	520	0.1	14
Mechanical.....	790	0.1	6
Safety.....	740	0.1	4
Sales.....	180	<	20
Other, n.e.c.....	2,130	0.3	(nc)
<b>Technicians</b> .....	4,700	0.7	(nc)
Computer programmer.....	140	<	8
Drafter.....	2,470	0.4	8
Surveyor.....	530	0.1	(nc)
Electrical/electronics engineering technician.....	180	<	7
Mechanical engineering technicians.....	400	0.1	37
Civil engineering technician.....	630	0.1	4
All other engineering technicians.....	350	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Highway and street construction (SIC 1610)</b>			
<b>Scientific and technical personnel</b> .....	4,600	1.7	(nc)
<b>Scientists</b> .....	40	<	(nc)
Computer analysts.....	40	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	460	0.2	15
<b>Engineers</b> .....	2,450	0.9	(nc)
Civil.....	1,740	0.6	11
Industrial.....	80	<	30
Mechanical.....	50	<	18
Safety.....	200	0.1	5
Sales.....	60	<	11
Other, n.e.c.....	320	0.1	(nc)
<b>Technicians</b> .....	1,650	0.6	(nc)
Computer programmer.....	60	<	9
Drafter.....	100	<	14
Surveyor.....	920	0.3	(nc)
Civil engineering technician.....	220	0.1	4
All other engineering technicians.....	300	0.1	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Heavy construction, except highway (SIC 1620)</b>			
<b>Scientific and technical personnel</b> .....	22,200	3.5	(nc)
<b>Scientists</b> .....	290	0.1	(nc)
Physical scientists.....	120	<	(nc)
All other physical scientists.....	120	<	(nc)
Computer analysts.....	170	<	8
<b>Managers of scientific and technical personnel</b> .....	740	0.1	6
<b>Engineers</b> .....	14,920	2.4	(nc)
Chemical.....	1,420	0.2	2
Civil.....	5,290	0.8	4
Computer.....	160	<	2
Electrical/electronics.....	1,420	0.2	1
Industrial.....	650	0.1	3
Mechanical.....	3,330	0.5	2
Safety.....	1,030	0.2	1
Sales.....	90	<	8
Other, n.e.c.....	1,530	0.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Heavy construction, except highway (SIC 1620) -- continued:</b>			
<b>Technicians.....</b>	6,250	1	(nc)
Computer programmer.....	220	<	5
Drafter.....	1,940	0.3	2
Surveyor.....	1,240	0.2	(nc)
Electrical/electronics engineering technician.....	740	0.1	7
Mechanical engineering technicians.....	470	0.1	2
Civil engineering technician.....	980	0.2	4
All other engineering technicians.....	570	0.1	(nc)
Physical and life science technicians.....	90	<	(nc)
All other physical and life science technicians.....	90	<	(nc)
<b>Plumbing, heating, air conditioning (SIC 1710)</b>			
<b>Scientific and technical personnel.....</b>	13,000	1.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	290	<	26
<b>Engineers.....</b>	6,100	0.7	(nc)
Civil.....	100	<	14
Electrical/electronics.....	200	<	26
Industrial.....	80	<	13
Mechanical.....	800	0.1	9
Safety.....	210	<	33
Sales.....	4,570	0.5	6
Other, n.e.c.....	140	<	(nc)
<b>Technicians.....</b>	6,610	0.8	(nc)
Computer programmer.....	170	<	10
Drafter.....	5,450	0.6	3
Electrical/electronics engineering technician.....	370	<	16
Mechanical engineering technicians.....	230	<	15
All other engineering technicians.....	280	<	(nc)
Physical and life science technicians.....	110	<	(nc)
All other physical and life science technicians.....	110	<	(nc)
<b>Painting and paper hanging (SIC 1720)</b>			
<b>Scientific and technical personnel.....</b>	10	<	(nc)
<b>Technicians.....</b>	10	<	(nc)
All other engineering technicians.....	10	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electrical work (SIC 1730)</b>			
<b>Scientific and technical personnel</b> .....	22,230	2.9	(nc)
<b>Scientists</b> .....	620	0.1	(nc)
Computer analysts.....	620	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	510	0.1	8
<b>Engineers</b> .....	5,560	0.7	(nc)
Civil.....	90	<	36
Computer.....	60	<	33
Electrical/electronics.....	4,330	0.6	10
Industrial.....	80	<	9
Safety.....	90	<	6
Sales.....	210	<	9
Other, n.e.c.....	700	0.1	(nc)
<b>Technicians</b> .....	15,540	2.1	(nc)
Computer programmer.....	220	<	11
Drafter.....	830	0.1	4
Electrical/electronics engineering technician.....	13,820	1.8	11
Civil engineering technician.....	210	<	41
All other engineering technicians.....	460	0.1	(nc)
<b>Masonry, stonework, and plastering (SIC 1740)</b>			
<b>Scientific and technical personnel</b> .....	220	<	(nc)
<b>Engineers</b> .....	70	<	41
Industrial.....	70	<	41
<b>Technicians</b> .....	150	<	(nc)
Drafter.....	110	<	21
All other engineering technicians.....	40	<	(nc)
<b>Carpentry and floor work (SIC 1750)</b>			
<b>Scientific and technical personnel</b> .....	570	0.2	(nc)
<b>Scientists</b> .....	30	<	(nc)
Computer analysts.....	30	<	(nc)
<b>Engineers</b> .....	120	<	(nc)
Sales.....	50	<	26
Other, n.e.c.....	70	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Carpentry and floor work (SIC 1750) -- continued:</b>			
<b>Technicians.....</b>	420	0.1	(nc)
Drafter.....	300	0.1	14
All other engineering technicians.....	120	<	(nc)
<b>Roofing, siding, and sheet-metal work (SIC 1760)</b>			
<b>Scientific and technical personnel.....</b>	590	0.2	(nc)
<b>Engineers.....</b>	90	<	(nc)
Civil.....	50	<	10
Other, n.e.c.....	40	<	(nc)
<b>Technicians.....</b>	500	0.2	13
Drafter.....	500	0.2	13
<b>Concrete work (SIC 1770)</b>			
<b>Scientific and technical personnel.....</b>	400	0.1	(nc)
<b>Engineers.....</b>	180	0.1	(nc)
Civil.....	110	<	44
Other, n.e.c.....	70	<	(nc)
<b>Technicians.....</b>	220	0.1	(nc)
Drafter.....	50	<	17
Surveyor.....	80	<	3
All other engineering technicians.....	90	<	(nc)
<b>Water-well drilling (SIC 1780)</b>			
<b>Scientific and technical personnel.....</b>	20	0.1	(nc)
<b>Engineers.....</b>	20	0.1	(nc)
Other, n.e.c.....	20	0.1	(nc)
<b>Misc. special trade contractors (SIC 1790)</b>			
<b>Scientific and technical personnel.....</b>	4,900	0.7	(nc)
<b>Scientists.....</b>	130	<	(nc)
Computer analysts.....	130	<	(nc)
<b>Managers of scientific and technical personnel.....</b>	140	<	18

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. special trade contractors (SIC 1790) -- continued:</b>			
<b>Engineers.....</b>	1,340	0.2	(nc)
Civil.....	280	<	13
Electrical/electronics.....	170	<	23
Mechanical.....	330	0.1	17
Safety.....	120	<	19
Sales.....	220	<	37
Other, n.e.c.....	220	<	(nc)
<b>Technicians.....</b>	3,290	0.5	(nc)
Drafter.....	2,190	0.3	5
Surveyor.....	140	<	(nc)
Electrical/electronics engineering technician.....	70	<	16
All other engineering technicians.....	890	0.1	(nc)

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.2. Employed scientists, engineers, technicians (SETs), and SET managers, in SICs 20-32 (selected manufacturing industries), and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Meat products (SIC 2010)</b>			
Scientific and technical personnel.....	4,110	0.8	(nc)
Scientists.....	640	0.1	(nc)
Physical scientists.....	200	<	(nc)
Chemists.....	150	<	2
All other physical scientists.....	50	<	0
Life scientists.....	110	<	(nc)
All other life scientists.....	110	<	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	320	0.1	4
Managers of scientific and technical personnel.....	480	0.1	5
Engineers.....	690	0.1	(nc)
Industrial.....	310	0.1	4
Mechanical.....	190	<	2
Other, n.e.c.....	190	<	(nc)
Technicians.....	2,300	0.5	(nc)
Computer programmer.....	360	0.1	3
Mechanical engineering technicians.....	90	<	2
All other engineering technicians.....	290	0.1	(nc)
Physical and life science technicians.....	1,560	0.3	(nc)
Biological science technician.....	990	0.2	<
Chemical technicians, except health.....	450	0.1	3
All other physical and life science technicians.....	120	<	0
<b>Dairy products (SIC 2020)</b>			
Scientific and technical personnel.....	4,690	3.3	(nc)
Scientists.....	770	0.5	(nc)
Physical scientists.....	310	0.2	(nc)
Chemists.....	270	0.2	1
All other physical scientists.....	40	<	4
Life scientists.....	130	0.1	(nc)
All other life scientists.....	130	0.1	(nc)
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	310	0.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Dairy products (SIC 2020) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	240	0.2	4
<b>Engineers</b> .....	590	0.4	(nc)
Industrial.....	360	0.3	2
Mechanical.....	110	0.1	4
Other, n.e.c.....	120	0.1	(nc)
<b>Technicians</b> .....	3,090	2.2	(nc)
Computer programmer.....	230	0.2	3
All other engineering technicians.....	250	0.2	(nc)
Physical and life science technicians.....	2,610	1.9	(nc)
Biological science technician.....	1,750	1.2	2
Chemical technicians, except health.....	710	0.5	3
All other physical and life science technicians.....	150	0.1	42
<b>Preserved fruits &amp; vegetables (SIC 2030)</b>			
<b>Scientific and technical personnel</b> .....	5,100	2.4	(nc)
<b>Scientists</b> .....	800	0.4	(nc)
Physical scientists.....	200	0.1	(nc)
Chemists.....	120	0.1	4
All other physical scientists.....	80	<	3
Life scientists.....	120	0.1	(nc)
All other life scientists.....	120	0.1	(nc)
Computer analysts.....	480	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	560	0.3	1
<b>Engineers</b> .....	590	0.3	(nc)
Industrial.....	230	0.1	4
Mechanical.....	200	0.1	1
Other, n.e.c.....	160	0.1	(nc)
<b>Technicians</b> .....	3,150	1.5	(nc)
Computer programmer.....	220	0.1	1
Mechanical engineering technicians.....	60	<	3
All other engineering technicians.....	550	0.3	(nc)
Physical and life science technicians.....	2,320	1.1	(nc)
Biological science technician.....	1,810	0.8	2
Chemical technicians, except health.....	400	0.2	3
All other physical and life science technicians.....	110	0.1	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Grain mill products (SIC 2040)</b>			
<b>Scientific and technical personnel</b> .....	4,130	3.3	(nc)
<b>Scientists</b> .....	960	0.8	(nc)
Physical scientists.....	570	0.5	(nc)
Chemists.....	530	0.4	5
All other physical scientists.....	40	<	0
Life scientists.....	160	0.1	(nc)
All other life scientists.....	160	0.1	(nc)
Computer analysts.....	230	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	510	0.4	2
<b>Engineers</b> .....	840	0.7	(nc)
Industrial.....	260	0.2	5
Mechanical.....	180	0.1	3
Other, n.e.c.....	400	0.3	(nc)
<b>Technicians</b> .....	1,820	1.5	(nc)
Computer programmer.....	140	0.1	4
Mechanical engineering technicians.....	40	<	3
All other engineering technicians.....	230	0.2	(nc)
Physical and life science technicians.....	1,410	1.1	(nc)
Biological science technician.....	940	0.8	3
Chemical technicians, except health.....	300	0.2	7
All other physical and life science technicians.....	170	0.1	7
<b>Bakery products (SIC 2050)</b>			
<b>Scientific and technical personnel</b> .....	2,240	1.1	(nc)
<b>Scientists</b> .....	210	0.1	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Computer analysts.....	180	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	320	0.2	1
<b>Engineers</b> .....	980	0.5	(nc)
Industrial.....	210	0.1	2
Mechanical.....	670	0.3	1
Other, n.e.c.....	100	0.1	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Bakery products (SIC 2050) -- continued:</b>			
<b>Technicians.....</b>	730	0.4	(nc)
Computer programmer.....	80	<	5
Mechanical engineering technicians.....	200	0.1	12
All other engineering technicians.....	180	0.1	(nc)
Physical and life science technicians.....	270	0.1	(nc)
Biological science technician.....	190	0.1	4
Chemical technicians, except health.....	80	<	10
<b>Sugar and confectionery products (SIC 2060)</b>			
<b>Scientific and technical personnel.....</b>	2,910	2.8	(nc)
<b>Scientists.....</b>	450	0.4	(nc)
Physical scientists.....	180	0.2	5
Chemists.....	180	0.2	5
Life scientists.....	80	0.1	(nc)
Agricultural scientists.....	30	<	14
All other life scientists.....	50	0.1	(nc)
Computer analysts.....	190	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	260	0.3	3
<b>Engineers.....</b>	590	0.6	(nc)
Industrial.....	150	0.1	8
Mechanical.....	300	0.3	1
Other, n.e.c.....	140	0.1	7
<b>Technicians.....</b>	1,610	1.6	(nc)
Computer programmer.....	130	0.1	5
Mechanical engineering technicians.....	40	<	32
All other engineering technicians.....	260	0.3	(nc)
Physical and life science technicians.....	1,180	1.2	(nc)
Biological science technician.....	720	0.7	2
Chemical technicians, except health.....	340	0.3	3
All other physical and life science technicians.....	120	0.1	0
<b>Fats and oils (SIC 2070)</b>			
<b>Scientific and technical personnel.....</b>	950	3.1	(nc)
<b>Scientists.....</b>	180	0.6	(nc)
Physical scientists.....	90	0.3	10
Chemists.....	90	0.3	10
Computer analysts.....	90	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Fats and oils (SIC 2070) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	90	0.3	6
<b>Engineers</b> .....	230	0.7	(nc)
Industrial.....	40	0.1	0
Mechanical.....	40	0.1	2
Other, n.e.c.....	150	0.5	(nc)
<b>Technicians</b> .....	450	1.5	(nc)
Mechanical engineering technicians.....	30	0.1	0
Physical and life science technicians.....	420	1.4	(nc)
Biological science technician.....	150	0.5	3
Chemical technicians, except health.....	190	0.6	1
All other physical and life science technicians.....	80	0.3	3
<b>Beverages (SIC 2080)</b>			
<b>Scientific and technical personnel</b> .....	5,520	3	(nc)
<b>Scientists</b> .....	1,070	0.6	(nc)
All other mathematicians.....	20	<	(nc)
Physical scientists.....	740	0.4	(nc)
Chemists.....	630	0.3	8
All other physical scientists.....	110	0.1	1
Life scientists.....	40	<	(nc)
All other life scientists.....	40	<	(nc)
Computer analysts.....	270	0.2	2
<b>Managers of scientific and technical personnel</b> .....	640	0.3	1
<b>Engineers</b> .....	480	0.3	(nc)
Industrial.....	120	0.1	2
Mechanical.....	100	0.1	10
Sales.....	40	<	2
Other, n.e.c.....	220	0.1	(nc)
<b>Technicians</b> .....	3,330	1.8	(nc)
Computer programmer.....	120	0.1	5
Mechanical engineering technicians.....	50	<	16
All other engineering technicians.....	420	0.2	(nc)
Physical and life science technicians.....	2,740	1.5	(nc)
Biological science technician.....	1,760	1	2
Chemical technicians, except health.....	810	0.4	9
All other physical and life science technicians.....	170	0.1	8

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. food and kindred products (SIC 2090)</b>			
<b>Scientific and technical personnel</b> .....	2,160	1.2	(nc)
<b>Scientists</b> .....	330	0.2	(nc)
Physical scientists.....	130	0.1	4
Chemists.....	130	0.1	4
Life scientists.....	60	<	(nc)
All other life scientists.....	60	<	(nc)
Computer analysts.....	140	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	210	0.1	5
<b>Engineers</b> .....	420	0.2	(nc)
Industrial.....	130	0.1	9
Mechanical.....	170	0.1	7
Other, n.e.c.....	120	0.1	9
<b>Technicians</b> .....	1,200	0.7	(nc)
Computer programmer.....	90	0.1	3
All other engineering technicians.....	180	0.1	(nc)
Physical and life science technicians.....	930	0.5	(nc)
Biological science technician.....	760	0.4	11
Chemical technicians, except health.....	170	0.1	4
<b>Cigarettes (SIC 2110)</b>			
<b>Scientific and technical personnel</b> .....	4,770	18.3	(nc)
<b>Scientists</b> .....	2,680	10.3	(nc)
Physical scientists.....	760	2.9	(nc)
Chemists.....	720	2.8	0
All other physical scientists.....	40	0.2	0
Life scientists.....	40	0.2	(nc)
All other life scientists.....	40	0.2	(nc)
Computer analysts.....	1,880	7.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	80	0.3	0
<b>Engineers</b> .....	830	3.2	(nc)
Industrial.....	270	1	0
Mechanical.....	220	0.9	0
Other, n.e.c.....	340	1.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Cigarettes (SIC 2110) -- continued:</b>			
<b>Technicians.....</b>	1,180	4.5	(nc)
Computer programmer.....	210	0.8	0
All other engineering technicians.....	750	2.9	(nc)
Physical and life science technicians.....	220	0.9	(nc)
All other physical and life science technicians.....	220	0.9	(nc)
<b>Chewing and smoking tobacco (SIC 2130)</b>			
<b>Scientific and technical personnel.....</b>	80	2.7	(nc)
<b>Scientists.....</b>	80	2.7	(nc)
Life scientists.....	30	1	(nc)
All other life scientists.....	30	1	(nc)
Computer analysts.....	50	1.7	(nc)
<b>Tobacco stemming and redrying (SIC 2140)</b>			
<b>Scientific and technical personnel.....</b>	40	0.5	(nc)
<b>Scientists.....</b>	40	0.5	(nc)
Computer analysts.....	40	0.5	(nc)
<b>Broadwoven fabric mills, cotton (SIC 2210)</b>			
<b>Scientific and technical personnel.....</b>	920	1.3	(nc)
<b>Scientists.....</b>	180	0.3	(nc)
Physical scientists.....	50	0.1	8
Chemists.....	50	0.1	8
Computer analysts.....	130	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	110	0.2	1
<b>Engineers.....</b>	240	0.3	(nc)
Industrial.....	170	0.2	1
Mechanical.....	30	<	3
Other, n.e.c.....	40	0.1	(nc)
<b>Technicians.....</b>	390	0.6	(nc)
Computer programmer.....	60	0.1	4
All other engineering technicians.....	170	0.3	(nc)
Physical and life science technicians.....	160	0.2	0
Chemical technicians, except health.....	160	0.2	0

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Broadwoven fabric mills, manmade (SIC 2220)</b>			
<b>Scientific and technical personnel.....</b>	1,530	2.5	(nc)
<b>Scientists.....</b>	230	0.4	(nc)
Physical scientists.....	60	0.1	3
Chemists.....	60	0.1	3
Computer analysts.....	170	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	160	0.3	4
<b>Engineers.....</b>	690	1.1	(nc)
Industrial.....	190	0.3	18
Mechanical.....	110	0.2	0
Sales.....	190	0.3	3
Other, n.e.c.....	200	0.3	(nc)
<b>Technicians.....</b>	450	0.7	(nc)
Computer programmer.....	80	0.1	10
Electrical/electronics engineering technician.....	30	0.1	0
All other engineering technicians.....	200	0.3	(nc)
Physical and life science technicians.....	140	0.2	11
Chemical technicians, except health.....	140	0.2	11
<b>Broadwoven fabric mills, wool (SIC 2230)</b>			
<b>Scientific and technical personnel.....</b>	120	1	(nc)
<b>Scientists.....</b>	70	0.6	(nc)
Computer analysts.....	70	0.6	(nc)
<b>Technicians.....</b>	50	0.4	21
All other engineering technicians.....	50	0.4	21
<b>Narrow fabric mills (SIC 2240)</b>			
<b>Scientific and technical personnel.....</b>	290	1.4	(nc)
<b>Scientists.....</b>	50	0.2	(nc)
Physical scientists.....	10	0.1	(nc)
All other physical scientists.....	10	0.1	(nc)
Computer analysts.....	40	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	40	0.2	12

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Narrow fabric mills (SIC 2240) -- continued:</b>			
Engineers.....	90	0.4	(nc)
Other, n.e.c.....	90	0.4	(nc)
Technicians.....	110	0.5	(nc)
All other engineering technicians.....	70	0.3	(nc)
Physical and life science technicians.....	40	0.2	0
Chemical technicians, except health.....	40	0.2	0
<b>Knitting mills (SIC 2250)</b>			
Scientific and technical personnel.....	1,370	0.9	(nc)
Scientists.....	190	0.1	(nc)
Physical scientists.....	50	<	4
Chemists.....	50	<	4
Computer analysts.....	140	0.1	3
Managers of scientific and technical personnel.....	110	0.1	3
Engineers.....	300	0.2	(nc)
Industrial.....	160	0.1	9
Other, n.e.c.....	140	0.1	(nc)
Technicians.....	770	0.5	(nc)
Computer programmer.....	150	0.1	3
All other engineering technicians.....	370	0.3	(nc)
Physical and life science technicians.....	250	0.2	6
Chemical technicians, except health.....	250	0.2	6
<b>Textile finishing, except wool (SIC 2260)</b>			
Scientific and technical personnel.....	1,180	1.9	(nc)
Scientists.....	240	0.4	(nc)
Physical scientists.....	140	0.2	22
Chemists.....	140	0.2	22
Computer analysts.....	100	0.2	(nc)
Managers of scientific and technical personnel.....	50	0.1	2
Engineers.....	210	0.3	(nc)
Industrial.....	100	0.2	13
Mechanical.....	70	0.1	2
Other, n.e.c.....	40	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Textile finishing, except wool (SIC 2260) -- continued:</b>			
<b>Technicians.....</b>	680	1.1	(nc)
Computer programmer.....	90	0.1	19
Mechanical engineering technicians.....	40	0.1	2
All other engineering technicians.....	250	0.4	(nc)
Physical and life science technicians.....	300	0.5	3
Chemical technicians, except health.....	300	0.5	3
<b>Carpets and rugs (SIC 2270)</b>			
<b>Scientific and technical personnel.....</b>	1,020	1.6	(nc)
<b>Scientists.....</b>	180	0.3	(nc)
Physical scientists.....	40	0.1	33
Chemists.....	40	0.1	33
Computer analysts.....	140	0.2	6
<b>Managers of scientific and technical personnel.....</b>	120	0.2	3
<b>Engineers.....</b>	280	0.4	(nc)
Industrial.....	100	0.2	0
Mechanical.....	120	0.2	0
Other, n.e.c.....	60	0.1	0
<b>Technicians.....</b>	440	0.7	(nc)
Computer programmer.....	90	0.1	4
All other engineering technicians.....	180	0.3	(nc)
Physical and life science technicians.....	170	0.3	(nc)
Chemical technicians, except health.....	130	0.2	23
All other physical and life science technicians.....	40	0.1	0
<b>Yarn and thread mills (SIC 2280)</b>			
<b>Scientific and technical personnel.....</b>	980	1.1	(nc)
<b>Scientists.....</b>	60	0.1	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	80	0.1	14
<b>Engineers.....</b>	350	0.4	(nc)
Industrial.....	140	0.2	8
Mechanical.....	150	0.2	45
Other, n.e.c.....	60	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Yarn and thread mills (SIC 2280) -- continued:</b>			
<b>Technicians</b> .....	490	0.6	(nc)
Computer programmer.....	40	0.1	6
All other engineering technicians.....	240	0.3	(nc)
Physical and life science technicians.....	210	0.2	5
Chemical technicians, except health.....	210	0.2	5
<b>Miscellaneous textile goods (SIC 2290)</b>			
<b>Scientific and technical personnel</b> .....	2,200	4	(nc)
<b>Scientists</b> .....	290	0.5	(nc)
Physical scientists.....	160	0.3	4
Chemists.....	160	0.3	4
Computer analysts.....	130	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	230	0.4	4
<b>Engineers</b> .....	860	1.6	(nc)
Industrial.....	310	0.6	2
Mechanical.....	290	0.5	2
Sales.....	60	0.1	0
Other, n.e.c.....	200	0.4	(nc)
<b>Technicians</b> .....	820	1.5	(nc)
Computer programmer.....	90	0.2	2
Mechanical engineering technicians.....	100	0.2	1
All other engineering technicians.....	270	0.5	(nc)
Physical and life science technicians.....	360	0.7	(nc)
Chemical technicians, except health.....	310	0.6	7
All other physical and life science technicians.....	50	0.1	0
<b>Men's &amp; boys' suits and coats (SIC 2310)</b>			
<b>Scientific and technical personnel</b> .....	130	0.5	(nc)
<b>Scientists</b> .....	80	0.3	(nc)
Computer analysts.....	80	0.3	(nc)
<b>Engineers</b> .....	50	0.2	0
Industrial.....	50	0.2	0

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Men's &amp; boys' furnishings (SIC 2320)</b>			
<b>Scientific and technical personnel</b> .....	1,510	0.9	(nc)
<b>Scientists</b> .....	430	0.3	(nc)
Computer analysts.....	430	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	170	0.1	5
<b>Engineers</b> .....	370	0.2	(nc)
Industrial.....	230	0.1	6
Mechanical.....	60	<	10
Other, n.e.c.....	80	0.1	(nc)
<b>Technicians</b> .....	540	0.3	(nc)
Computer programmer.....	300	0.2	9
All other engineering technicians.....	190	0.1	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Women's and misses' outerwear (SIC 2330)</b>			
<b>Scientific and technical personnel</b> .....	450	0.2	(nc)
<b>Scientists</b> .....	170	0.1	(nc)
Computer analysts.....	170	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	60	<	5
<b>Engineers</b> .....	90	<	(nc)
Industrial.....	50	<	5
Other, n.e.c.....	40	<	(nc)
<b>Technicians</b> .....	130	0.1	(nc)
Computer programmer.....	80	<	6
All other engineering technicians.....	50	<	(nc)
<b>Women's and children's undergarments (SIC 2340)</b>			
<b>Scientific and technical personnel</b> .....	300	1	(nc)
<b>Scientists</b> .....	90	0.3	(nc)
Computer analysts.....	90	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Women's and children's undergarments (SIC 2340) -- continued:</b>			
<b>Engineers</b> .....	120	0.4	(nc)
Industrial.....	50	0.2	5
Other, n.e.c.....	70	0.2	(nc)
<b>Technicians</b> .....	90	0.3	(nc)
Computer programmer.....	50	0.2	0
All other engineering technicians.....	40	0.1	2
<b>Hats, caps, and millinery (SIC 2350)</b>			
<b>Scientific and technical personnel</b> .....	40	0.3	(nc)
<b>Scientists</b> .....	40	0.3	(nc)
Computer analysts.....	40	0.3	(nc)
<b>Girls' and children's outerwear (SIC 2360)</b>			
<b>Scientific and technical personnel</b> .....	80	0.4	(nc)
<b>Scientists</b> .....	40	0.2	(nc)
Computer analysts.....	40	0.2	(nc)
<b>Engineers</b> .....	30	0.1	10
Industrial.....	30	0.1	10
<b>Technicians</b> .....	10	0.1	(nc)
Physical and life science technicians.....	10	0.1	(nc)
All other physical and life science technicians.....	10	0.1	(nc)
<b>Miscellaneous apparel and accessories (SIC 2380)</b>			
<b>Scientific and technical personnel</b> .....	290	1	(nc)
<b>Scientists</b> .....	100	0.3	(nc)
Physical scientists.....	30	0.1	(nc)
All other physical scientists.....	30	0.1	(nc)
Computer analysts.....	70	0.2	(nc)
<b>Engineers</b> .....	70	0.2	(nc)
Industrial.....	40	0.1	3
Other, n.e.c.....	30	0.1	(nc)
<b>Technicians</b> .....	120	0.4	(nc)
Computer programmer.....	40	0.1	3
All other engineering technicians.....	80	0.3	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. fabricated textile products (SIC 2390)</b>			
<b>Scientific and technical personnel</b> .....	2,110	1	(nc)
<b>Scientists</b> .....	150	0.1	(nc)
Computer analysts.....	150	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	260	0.1	14
<b>Engineers</b> .....	1,090	0.5	(nc)
Industrial.....	430	0.2	3
Mechanical.....	240	0.1	20
Sales.....	40	<	3
Other, n.e.c.....	380	0.2	(nc)
<b>Technicians</b> .....	610	0.3	(nc)
Computer programmer.....	110	0.1	7
Mechanical engineering technicians.....	90	<	20
All other engineering technicians.....	410	0.2	(nc)
<b>Logging (SIC 2410)</b>			
<b>Scientific and technical personnel</b> .....	600	0.8	(nc)
<b>Scientists</b> .....	560	0.7	7
Life scientists.....	560	0.7	7
Foresters and conservation scientists.....	560	0.7	7
<b>Technicians</b> .....	40	0.1	(nc)
All other engineering technicians.....	40	0.1	(nc)
<b>Sawmills and planing mills (SIC 2420)</b>			
<b>Scientific and technical personnel</b> .....	1,890	1	(nc)
<b>Scientists</b> .....	1,170	0.7	(nc)
Life scientists.....	800	0.4	6
Foresters and conservation scientists.....	800	0.4	6
Computer analysts.....	370	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	180	0.1	7
<b>Engineers</b> .....	270	0.2	(nc)
Industrial.....	80	<	5
Mechanical.....	120	0.1	16
Other, n.e.c.....	70	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Sawmills and planing mills (SIC 2420) -- continued:</b>			
<b>Technicians.....</b>	270	0.1	(nc)
Drafter.....	40	<	18
All other engineering technicians.....	190	0.1	(nc)
Physical and life science technicians.....	40	<	(nc)
All other physical and life science technicians.....	40	<	(nc)
<b>Millwork, plywood &amp; structural members (SIC 2430)</b>			
<b>Scientific and technical personnel.....</b>	6,500	2.1	(nc)
<b>Scientists.....</b>	900	0.3	(nc)
Operations and systems researchers and analysts.....	60	<	0
Life scientists.....	150	0.1	1
Foresters and conservation scientists.....	150	0.1	1
Computer analysts.....	690	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	560	0.2	13
<b>Engineers.....</b>	1,340	0.4	(nc)
Industrial.....	330	0.1	13
Mechanical.....	410	0.1	3
Sales.....	200	0.1	10
Other, n.e.c.....	400	0.1	(nc)
<b>Technicians.....</b>	3,700	1.2	(nc)
Computer programmer.....	310	0.1	4
Drafter.....	2,640	0.8	4
Mechanical engineering technicians.....	190	0.1	3
All other engineering technicians.....	510	0.2	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Wood containers (SIC 2440)</b>			
<b>Scientific and technical personnel.....</b>	120	0.2	(nc)
<b>Scientists.....</b>	30	0.1	(nc)
Life scientists.....	30	0.1	(nc)
All other life scientists.....	30	0.1	(nc)
<b>Engineers.....</b>	30	0.1	(nc)
Other, n.e.c.....	30	0.1	(nc)
<b>Technicians.....</b>	60	0.1	(nc)
All other engineering technicians.....	60	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Wood buildings and mobile homes (SIC 2450)</b>			
<b>Scientific and technical personnel</b> .....	1,910	1.9	(nc)
<b>Scientists</b> .....	40	<	13
Computer analysts.....	40	<	13
<b>Managers of scientific and technical personnel</b> .....	150	0.2	4
<b>Engineers</b> .....	380	0.4	(nc)
Industrial.....	50	0.1	10
Mechanical.....	160	0.2	5
Sales.....	100	0.1	5
Other, n.e.c.....	70	0.1	(nc)
<b>Technicians</b> .....	1,340	1.3	(nc)
Computer programmer.....	40	<	19
Drafter.....	1,180	1.2	6
All other engineering technicians.....	120	0.1	(nc)
<b>Miscellaneous wood products (SIC 2490)</b>			
<b>Scientific and technical personnel</b> .....	760	0.9	(nc)
<b>Scientists</b> .....	120	0.1	(nc)
Life scientists.....	60	0.1	11
Foresters and conservation scientists.....	60	0.1	11
Computer analysts.....	60	0.1	4
<b>Managers of scientific and technical personnel</b> .....	80	0.1	3
<b>Engineers</b> .....	280	0.3	(nc)
Industrial.....	100	0.1	2
Mechanical.....	90	0.1	8
Other, n.e.c.....	90	0.1	(nc)
<b>Technicians</b> .....	280	0.3	(nc)
Computer programmer.....	40	0.1	5
Drafter.....	120	0.1	6
All other engineering technicians.....	120	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Household furniture (SIC 2510)</b>			
<b>Scientific and technical personnel</b> .....	2,700	0.9	(nc)
<b>Scientists</b> .....	200	0.1	6
Computer analysts.....	200	0.1	6
<b>Managers of scientific and technical personnel</b> .....	340	0.1	5
<b>Engineers</b> .....	820	0.3	(nc)
Industrial.....	370	0.1	5
Mechanical.....	170	0.1	4
Other, n.e.c.....	280	0.1	(nc)
<b>Technicians</b> .....	1,340	0.5	(nc)
Computer programmer.....	350	0.1	3
Drafter.....	530	0.2	2
Mechanical engineering technicians.....	70	<	13
All other engineering technicians.....	390	0.1	(nc)
<b>Office furniture (SIC 2520)</b>			
<b>Scientific and technical personnel</b> .....	3,080	4.4	(nc)
<b>Scientists</b> .....	350	0.5	(nc)
Computer analysts.....	350	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	260	0.4	3
<b>Engineers</b> .....	1,250	1.8	(nc)
Industrial.....	330	0.5	2
Mechanical.....	340	0.5	1
Other, n.e.c.....	580	0.8	(nc)
<b>Technicians</b> .....	1,220	1.7	(nc)
Computer programmer.....	300	0.4	1
Drafter.....	500	0.7	5
Mechanical engineering technicians.....	50	0.1	2
All other engineering technicians.....	370	0.5	(nc)
<b>Public building &amp; related furniture (SIC 2530)</b>			
<b>Scientific and technical personnel</b> .....	1,960	4.1	(nc)
<b>Scientists</b> .....	150	0.3	(nc)
Computer analysts.....	150	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Public building &amp; related furniture (SIC 2530) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	190	0.4	2
<b>Engineers</b> .....	730	1.5	(nc)
Industrial.....	170	0.4	0
Mechanical.....	230	0.5	2
Other, n.e.c.....	330	0.7	(nc)
<b>Technicians</b> .....	890	1.9	(nc)
Computer programmer.....	50	0.1	2
Drafter.....	460	1	1
Mechanical engineering technicians.....	100	0.2	17
All other engineering technicians.....	280	0.6	(nc)
<b>Partitions and fixtures (SIC 2540)</b>			
<b>Scientific and technical personnel</b> .....	3,060	3.3	(nc)
<b>Scientists</b> .....	90	0.1	(nc)
Computer analysts.....	90	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	250	0.3	3
<b>Engineers</b> .....	820	0.9	(nc)
Industrial.....	220	0.2	5
Mechanical.....	220	0.2	4
Sales.....	100	0.1	15
Other, n.e.c.....	280	0.3	(nc)
<b>Technicians</b> .....	1,900	2	(nc)
Computer programmer.....	120	0.1	5
Drafter.....	1,500	1.6	4
Mechanical engineering technicians.....	70	0.1	4
All other engineering technicians.....	210	0.2	(nc)
<b>Miscellaneous furniture and fixtures (SIC 2590)</b>			
<b>Scientific and technical personnel</b> .....	920	2.3	(nc)
<b>Scientists</b> .....	70	0.2	(nc)
Computer analysts.....	70	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	80	0.2	4

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous furniture and fixtures (SIC 2590) -- continued:</b>			
<b>Engineers.....</b>	370	0.9	(nc)
Industrial.....	100	0.2	4
Mechanical.....	100	0.2	5
Sales.....	80	0.2	21
Other, n.e.c.....	90	0.2	7
<b>Technicians.....</b>	400	1	(nc)
Computer programmer.....	40	0.1	13
Drafter.....	270	0.7	1
Mechanical engineering technicians.....	30	0.1	11
All other engineering technicians.....	60	0.2	10
<b>Pulp mills (SIC 2610)</b>			
<b>Scientific and technical personnel.....</b>	620	5.4	(nc)
<b>Scientists.....</b>	120	1.1	(nc)
Life scientists.....	30	0.3	(nc)
All other life scientists.....	30	0.3	(nc)
Computer analysts.....	90	0.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	60	0.5	0
<b>Engineers.....</b>	260	2.3	(nc)
Chemical.....	40	0.4	0
Electrical/electronics.....	40	0.4	0
Industrial.....	70	0.6	0
Mechanical.....	50	0.4	0
Other, n.e.c.....	60	0.5	(nc)
<b>Technicians.....</b>	180	1.6	(nc)
All other engineering technicians.....	110	1	(nc)
Physical and life science technicians.....	70	0.6	0
Chemical technicians, except health.....	70	0.6	0

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Paper mills (SIC 2620)</b>			
<b>Scientific and technical personnel.....</b>	7,560	5	(nc)
<b>Scientists.....</b>	880	0.6	(nc)
Physical scientists.....	330	0.2	(nc)
Chemists.....	180	0.1	9
All other physical scientists.....	150	0.1	1
Life scientists.....	220	0.2	(nc)
Foresters and conservation scientists.....	180	0.1	6
All other life scientists.....	40	<	(nc)
Computer analysts.....	330	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	620	0.4	1
<b>Engineers.....</b>	4,070	2.7	(nc)
Chemical.....	960	0.6	5
Computer.....	210	0.1	<
Electrical/electronics.....	450	0.3	<
Industrial.....	550	0.4	1
Mechanical.....	980	0.7	1
Other, n.e.c.....	920	0.6	(nc)
<b>Technicians.....</b>	1,990	1.3	(nc)
Computer programmer.....	160	0.1	1
Drafter.....	110	0.1	1
Electrical/electronics engineering technician.....	420	0.3	2
Mechanical engineering technicians.....	90	0.1	3
All other engineering technicians.....	530	0.4	(nc)
Physical and life science technicians.....	680	0.5	(nc)
Chemical technicians, except health.....	550	0.4	6
All other physical and life science technicians.....	130	0.1	2
<b>Paperboard mills (SIC 2630)</b>			
<b>Scientific and technical personnel.....</b>	2,630	5.4	(nc)
<b>Scientists.....</b>	510	1.1	(nc)
Physical scientists.....	50	0.1	(nc)
All other physical scientists.....	50	0.1	(nc)
Life scientists.....	210	0.4	(nc)
Foresters and conservation scientists.....	110	0.2	21
All other life scientists.....	100	0.2	(nc)
Computer analysts.....	250	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Paperboard mills (SIC 2630) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	190	0.4	2
<b>Engineers</b> .....	1,160	2.4	(nc)
Chemical.....	260	0.5	1
Computer.....	80	0.2	0
Electrical/electronics.....	180	0.4	0
Industrial.....	200	0.4	1
Mechanical.....	290	0.6	1
Other, n.e.c.....	150	0.3	(nc)
<b>Technicians</b> .....	770	1.6	(nc)
Computer programmer.....	140	0.3	11
Drafter.....	60	0.1	0
Electrical/electronics engineering technician.....	60	0.1	0
Mechanical engineering technicians.....	40	0.1	0
All other engineering technicians.....	180	0.4	(nc)
Physical and life science technicians.....	290	0.6	(nc)
Chemical technicians, except health.....	100	0.2	0
All other physical and life science technicians.....	190	0.4	(nc)
<b>Paperboard containers and boxes (SIC 2650)</b>			
<b>Scientific and technical personnel</b> .....	2,390	1.1	(nc)
<b>Scientists</b> .....	290	0.1	(nc)
Physical scientists.....	50	<	39
Chemists.....	50	<	39
Computer analysts.....	240	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	270	0.1	9
<b>Engineers</b> .....	850	0.4	(nc)
Chemical.....	120	0.1	18
Electrical/electronics.....	50	<	8
Industrial.....	200	0.1	3
Mechanical.....	180	0.1	6
Sales.....	60	<	8
Other, n.e.c.....	240	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Paperboard containers and boxes (SIC 2650) -- continued:</b>			
<b>Technicians.....</b>	980	0.5	(nc)
Computer programmer.....	90	<	7
Drafter.....	200	0.1	8
Electrical/electronics engineering technician.....	90	<	8
Mechanical engineering technicians.....	80	<	4
All other engineering technicians.....	420	0.2	(nc)
Physical and life science technicians.....	100	0.1	(nc)
All other physical and life science technicians.....	100	0.1	(nc)
<b>Misc. converted paper products (SIC 2670)</b>			
<b>Scientific and technical personnel.....</b>	9,780	4	(nc)
<b>Scientists.....</b>	2,080	0.9	(nc)
Physical scientists.....	680	0.3	(nc)
All other physical scientists.....	680	0.3	(nc)
Life scientists.....	100	<	(nc)
All other life scientists.....	100	<	(nc)
Computer analysts.....	1,300	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	950	0.4	3
<b>Engineers.....</b>	3,890	1.6	(nc)
Chemical.....	160	0.1	5
Electrical/electronics.....	220	0.1	4
Industrial.....	690	0.3	4
Mechanical.....	390	0.2	2
Sales.....	80	<	22
Other, n.e.c.....	2,350	1	(nc)
<b>Technicians.....</b>	2,860	1.2	(nc)
Computer programmer.....	240	0.1	3
Drafter.....	160	0.1	11
Electrical/electronics engineering technician.....	550	0.2	3
Mechanical engineering technicians.....	150	0.1	7
All other engineering technicians.....	1,060	0.4	(nc)
Physical and life science technicians.....	700	0.3	(nc)
Chemical technicians, except health.....	360	0.2	6
All other physical and life science technicians.....	340	0.1	0

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Newspapers (SIC 2710)</b>			
<b>Scientific and technical personnel.....</b>	5,950	1.4	(nc)
<b>Scientists.....</b>	2,350	0.5	(nc)
Operations and systems researchers and analysts.....	60	<	0
All other mathematicians.....	210	0.1	(nc)
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	2,060	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	740	0.2	1
<b>Engineers.....</b>	600	0.1	(nc)
Computer.....	100	<	0
Electrical/electronics.....	30	<	0
Industrial.....	160	<	1
Mechanical.....	160	<	1
Other, n.e.c.....	150	<	(nc)
<b>Technicians.....</b>	2,260	0.5	(nc)
Computer programmer.....	1,530	0.4	5
Electrical/electronics engineering technician.....	200	0.1	5
Mechanical engineering technicians.....	100	<	21
All other engineering technicians.....	430	0.1	(nc)
<b>Periodicals (SIC 2720)</b>			
<b>Scientific and technical personnel.....</b>	3,200	2.3	(nc)
<b>Scientists.....</b>	1,460	1.1	(nc)
Social scientists.....	60	<	27
Economists.....	60	<	27
Computer analysts.....	1,400	1	(nc)
<b>Managers of scientific and technical personnel.....</b>	340	0.3	3
<b>Engineers.....</b>	220	0.2	(nc)
Industrial.....	50	<	4
Other, n.e.c.....	170	0.1	(nc)
<b>Technicians.....</b>	1,180	0.9	(nc)
Computer programmer.....	1,040	0.8	5
Drafter.....	60	<	16
All other engineering technicians.....	80	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Books (SIC 2730)</b>			
<b>Scientific and technical personnel.....</b>	3,000	2.4	(nc)
<b>Scientists.....</b>	1,420	1.2	(nc)
Social scientists.....	50	<	3
Economists.....	50	<	3
Computer analysts.....	1,370	1.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	350	0.3	2
<b>Engineers.....</b>	280	0.2	(nc)
Industrial.....	100	0.1	0
Other, n.e.c.....	180	0.2	(nc)
<b>Technicians.....</b>	950	0.8	(nc)
Computer programmer.....	800	0.7	5
Mechanical engineering technicians.....	50	<	0
All other engineering technicians.....	100	0.1	(nc)
<b>Miscellaneous publishing (SIC 2740)</b>			
<b>Scientific and technical personnel.....</b>	3,900	4.2	(nc)
<b>Scientists.....</b>	1,330	1.4	(nc)
All other mathematicians.....	50	0.1	(nc)
Social scientists.....	140	0.2	(nc)
Economists.....	130	0.1	2
All other social scientists.....	10	<	(nc)
Computer analysts.....	1,140	1.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	290	0.3	2
<b>Engineers.....</b>	430	0.5	(nc)
Industrial.....	40	<	0
Sales.....	30	<	5
Other, n.e.c.....	360	0.4	(nc)
<b>Technicians.....</b>	1,850	2	(nc)
Computer programmer.....	1,140	1.2	8
Drafter.....	500	0.5	10
Surveyor.....	70	0.1	15
All other engineering technicians.....	140	0.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Commercial printing (SIC 2750)</b>			
<b>Scientific and technical personnel</b> .....	5,450	0.9	(nc)
<b>Scientists</b> .....	1,260	0.2	(nc)
Physical scientists.....	70	<	(nc)
All other physical scientists.....	70	<	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	1,180	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	560	0.1	4
<b>Engineers</b> .....	1,130	0.2	(nc)
Industrial.....	360	0.1	9
Mechanical.....	180	<	5
Sales	250	<	16
Other, n.e.c.....	340	0.1	(nc)
<b>Technicians</b> .....	2,500	0.4	(nc)
Computer programmer.....	1,290	0.2	11
Drafter.....	560	0.1	33
Electrical/electronics engineering technician.....	60	<	0
Mechanical engineering technicians.....	40	<	11
All other engineering technicians.....	500	0.1	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Manifold business forms (SIC 2760)</b>			
<b>Scientific and technical personnel</b> .....	380	0.9	(nc)
<b>Scientists</b> .....	170	0.4	(nc)
Computer analysts.....	170	0.4	(nc)
<b>Engineers</b> .....	60	0.2	(nc)
Other, n.e.c.....	60	0.2	(nc)
<b>Technicians</b> .....	150	0.4	(nc)
Computer programmer.....	110	0.3	13
All other engineering technicians.....	40	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Greeting cards (SIC 2770)</b>			
<b>Scientific and technical personnel</b> .....	760	2.7	(nc)
<b>Scientists</b> .....	290	1	(nc)
Computer analysts.....	290	1	(nc)
<b>Managers of scientific and technical personnel</b> .....	120	0.4	0
<b>Engineers</b> .....	50	0.2	(nc)
Other, n.e.c.....	50	0.2	(nc)
<b>Technicians</b> .....	300	1.1	(nc)
Computer programmer.....	40	0.1	0
Mechanical engineering technicians.....	70	0.3	2
All other engineering technicians.....	190	0.7	2
<b>Blankbooks and bookbinding (SIC 2780)</b>			
<b>Scientific and technical personnel</b> .....	680	1.1	(nc)
<b>Scientists</b> .....	190	0.3	(nc)
Computer analysts.....	190	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	90	0.1	10
<b>Engineers</b> .....	120	0.2	(nc)
Industrial.....	60	0.1	5
Other, n.e.c.....	60	0.1	(nc)
<b>Technicians</b> .....	280	0.4	(nc)
Computer programmer.....	210	0.3	8
All other engineering technicians.....	70	0.1	(nc)
<b>Printing trade services (SIC 2790)</b>			
<b>Scientific and technical personnel</b> .....	1,170	2.4	(nc)
<b>Scientists</b> .....	390	0.8	(nc)
Physical scientists.....	60	0.1	(nc)
All other physical scientists.....	60	0.1	(nc)
Social scientists.....	30	0.1	(nc)
All other social scientists.....	30	0.1	(nc)
Computer analysts.....	300	0.6	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Printing trade services (SIC 2790) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	70	0.1	3
<b>Engineers</b> .....	140	0.3	(nc)
Other, n.e.c. ....	140	0.3	(nc)
<b>Technicians</b> .....	570	1.2	(nc)
Computer programmer.....	390	0.8	10
Drafter.....	40	0.1	28
Mechanical engineering technicians.....	30	0.1	0
All other engineering technicians.....	100	0.2	(nc)
Physical and life science technicians.....	10	<	(nc)
All other physical and life science technicians.....	10	<	(nc)
<b>Industrial inorganic chemicals (SIC 2810)</b>			
<b>Scientific and technical personnel</b> .....	21,410	18.6	(nc)
<b>Scientists</b> .....	3,800	3.3	(nc)
All other mathematicians.....	30	<	15
Physical scientists.....	2,810	2.5	(nc)
Chemists.....	2,450	2.1	5
All other physical scientists.....	360	0.3	(nc)
Life scientists.....	180	0.2	10
Biological scientists.....	180	0.2	10
Computer analysts.....	780	0.7	(nc)
<b>Engineers</b> .....	10,050	8.8	(nc)
Chemical.....	2,710	2.4	1
Electrical/electronics.....	230	0.2	2
Mechanical.....	1,190	1	2
Sales.....	420	0.4	7
Other, n.e.c. ....	5,500	4.8	(nc)
<b>Technicians</b> .....	7,560	6.6	(nc)
Drafter.....	270	0.2	1
Electrical/electronics engineering technician.....	290	0.3	2
Mechanical engineering technicians.....	270	0.2	2
All other engineering technicians.....	1,840	1.6	(nc)
Physical and life science technicians.....	4,890	4.3	(nc)
Chemical technicians, except health.....	4,290	3.7	2
All other physical and life science technicians.....	600	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Plastics materials and synthetics (SIC 2820)</b>			
<b>Scientific and technical personnel.....</b>	27,450	17.7	(nc)
<b>Scientists.....</b>	6,330	4.1	(nc)
Physical scientists.....	5,260	3.4	(nc)
Chemists.....	2,870	1.9	1
All other physical scientists.....	2,390	1.6	1
Life scientists.....	140	0.1	(nc)
All other life scientists.....	140	0.1	(nc)
Social scientists.....	40	<	6
Economists.....	40	<	6
Computer analysts.....	890	0.6	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,510	1	2
<b>Engineers.....</b>	9,460	6.1	(nc)
Chemical.....	3,170	2.1	1
Civil.....	60	<	2
Computer.....	230	0.2	4
Electrical/electronics.....	390	0.3	2
Industrial.....	440	0.3	2
Mechanical.....	1,000	0.7	1
Metallurgical/metallurgists.....	60	<	9
Safety.....	310	0.2	2
Sales.....	260	0.2	3
Other, n.e.c.....	3,540	2.3	(nc)
<b>Technicians.....</b>	10,150	6.6	(nc)
Computer programmer.....	150	0.1	4
Drafter.....	180	0.1	2
Electrical/electronics engineering technician.....	420	0.3	6
Mechanical engineering technicians.....	170	0.1	14
All other engineering technicians.....	1,740	1.1	(nc)
Physical and life science technicians.....	7,490	4.9	(nc)
Biological science technician.....	120	0.1	14
Chemical technicians, except health.....	6,520	4.2	1
All other physical and life science technicians.....	850	0.6	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Drugs (SIC 2830)</b>			
<b>Scientific and technical personnel.....</b>	60,970	21.8	(nc)
<b>Scientists.....</b>	30,840	11	(nc)
Operations and systems researchers and analysts.....	60	<	0
Statisticians.....	120	<	0
All other mathematicians.....	170	0.1	(nc)
Physical scientists.....	13,620	4.9	(nc)
Chemists.....	11,770	4.2	3
All other physical scientists.....	1,850	0.7	(nc)
Life scientists.....	13,770	4.9	(nc)
Biological scientists.....	9,630	3.5	2
Medical scientists.....	1,880	0.7	1
All other life scientists.....	2,260	0.8	(nc)
Social scientists.....	70	<	0
Economists.....	70	<	0
Computer analysts.....	3,030	1.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	4,300	1.5	1
<b>Engineers.....</b>	7,620	2.7	(nc)
Chemical.....	3,090	1.1	1
Civil.....	380	0.1	1
Computer.....	310	0.1	4
Electrical/electronics.....	300	0.1	4
Industrial.....	870	0.3	1
Mechanical.....	520	0.2	4
Safety.....	640	0.2	1
Sales.....	110	<	16
Other, n.e.c.....	1,400	0.5	(nc)
<b>Technicians.....</b>	18,210	6.5	(nc)
Computer programmer.....	580	0.2	2
Drafter.....	240	0.1	9
Electrical/electronics engineering technician.....	350	0.1	8
All other engineering technicians.....	1,840	0.7	(nc)
Physical and life science technicians.....	15,200	5.4	(nc)
Biological science technician.....	3,800	1.4	2
Chemical technicians, except health.....	9,320	3.3	2
All other physical and life science technicians.....	2,080	0.7	1

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Soap, cleaners, and toilet goods (SIC 2840)</b>			
<b>Scientific and technical personnel</b> .....	14,090	9	(nc)
<b>Scientists</b> .....	5,900	3.8	(nc)
Physical scientists.....	4,710	3	(nc)
Chemists.....	4,120	2.6	2
All other physical scientists.....	590	0.4	<
Life scientists.....	350	0.2	5
Biological scientists.....	350	0.2	5
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	820	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,680	1.1	2
<b>Engineers</b> .....	2,500	1.6	(nc)
Chemical.....	590	0.4	6
Computer.....	70	<	4
Electrical/electronics.....	90	0.1	0
Industrial.....	250	0.2	5
Mechanical.....	200	0.1	5
Safety.....	130	0.1	7
Sales.....	110	0.1	11
Other, n.e.c.....	1,060	0.7	(nc)
<b>Technicians</b> .....	4,010	2.6	(nc)
Computer programmer.....	250	0.2	2
Drafter.....	40	<	3
Electrical/electronics engineering technician.....	80	0.1	2
Mechanical engineering technicians.....	160	0.1	1
All other engineering technicians.....	480	0.3	(nc)
Physical and life science technicians.....	3,000	1.9	(nc)
Biological science technician.....	100	0.1	6
Chemical technicians, except health.....	2,670	1.7	2
All other physical and life science technicians.....	230	0.2	(nc)
<b>Paints and allied products (SIC 2850)</b>			
<b>Scientific and technical personnel</b> .....	6,920	13.3	(nc)
<b>Scientists</b> .....	2,100	4.1	(nc)
Physical scientists.....	1,970	3.8	(nc)
Chemists.....	1,890	3.7	2
All other physical scientists.....	80	0.2	0
Computer analysts.....	130	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Paints and allied products (SIC 2850) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	290	0.6	3
<b>Engineers</b> .....	880	1.7	(nc)
Chemical.....	410	0.8	4
Industrial.....	90	0.2	5
Mechanical.....	90	0.2	11
Safety.....	40	0.1	4
Sales.....	170	0.3	7
Other, n.e.c.....	80	0.2	(nc)
<b>Technicians</b> .....	3,650	7.1	(nc)
Computer programmer.....	60	0.1	5
All other engineering technicians.....	1,070	2.1	(nc)
Physical and life science technicians.....	2,520	4.9	(nc)
Chemical technicians, except health.....	2,410	4.7	1
All other physical and life science technicians.....	110	0.2	(nc)
<b>Industrial organic chemicals (SIC 2860)</b>			
<b>Scientific and technical personnel</b> .....	29,210	21.6	(nc)
<b>Scientists</b> .....	9,550	7.1	(nc)
All other mathematicians.....	190	0.1	0
Physical scientists.....	6,610	4.9	(nc)
Chemists.....	6,110	4.5	3
Atmospheric and space scientists.....	90	0.1	0
All other physical scientists.....	410	0.3	(nc)
Life scientists.....	1,240	0.9	(nc)
Biological scientists.....	1,120	0.8	4
Medical scientists.....	80	0.1	0
All other life scientists.....	40	<	22
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	1,490	1.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,510	1.1	1

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Industrial organic chemicals (SIC 2860) -- continued:</b>			
<b>Engineers.....</b>	7,490	5.6	(nc)
Chemical.....	3,470	2.6	2
Civil.....	90	0.1	8
Computer.....	70	0.1	22
Electrical/electronics.....	470	0.4	5
Industrial.....	320	0.2	3
Mechanical.....	820	0.6	2
Safety.....	280	0.2	3
Sales.....	130	0.1	10
Other, n.e.c.....	1,840	1.4	(nc)
<b>Technicians.....</b>	10,660	7.9	(nc)
Computer programmer.....	580	0.4	3
Drafter.....	270	0.2	2
Electrical/electronics engineering technician.....	300	0.2	1
Mechanical engineering technicians.....	350	0.3	1
All other engineering technicians.....	920	0.7	(nc)
Physical and life science technicians.....	8,240	6.1	(nc)
Biological science technician.....	840	0.6	3
Chemical technicians, except health.....	6,100	4.5	1
All other physical and life science technicians.....	1,300	1	(nc)
<b>Agricultural chemicals (SIC 2870)</b>			
<b>Scientific and technical personnel.....</b>	6,670	13.3	(nc)
<b>Scientists.....</b>	2,180	4.4	(nc)
Physical scientists.....	1,030	2.1	(nc)
Chemists.....	790	1.6	4
Geologists, geophysicists, and earth scientists.....	30	0.1	0
All other physical scientists.....	210	0.4	<
Life scientists.....	390	0.8	(nc)
Biological scientists.....	360	0.7	6
All other life scientists.....	30	0.1	(nc)
Computer analysts.....	760	1.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	340	0.7	2

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Agricultural chemicals (SIC 2870) -- continued:</b>			
Engineers.....	1,800	3.6	(nc)
Chemical.....	800	1.6	1
Computer.....	40	0.1	5
Electrical/electronics.....	120	0.2	1
Mechanical.....	330	0.7	3
Safety.....	150	0.3	3
Sales.....	60	0.1	7
Other, n.e.c.....	300	0.6	(nc)
Technicians.....	2,350	4.7	(nc)
Drafter.....	100	0.2	2
Electrical/electronics engineering technician.....	200	0.4	4
Mechanical engineering technicians.....	70	0.1	0
All other engineering technicians.....	380	0.8	(nc)
Physical and life science technicians.....	1,600	3.2	(nc)
Biological science technician.....	90	0.2	33
Chemical technicians, except health.....	1,430	2.9	6
All other physical and life science technicians.....	80	0.2	(nc)
<b>Miscellaneous chemical products (SIC 2890)</b>			
Scientific and technical personnel.....	13,550	14.4	(nc)
Scientists.....	3,430	3.7	(nc)
Physical scientists.....	3,070	3.3	(nc)
Chemists.....	2,900	3.1	2
All other physical scientists.....	170	0.2	11
Life scientists.....	80	0.1	9
Biological scientists.....	80	0.1	9
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	270	0.3	(nc)
Managers of scientific and technical personnel.....	980	1	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous chemical products (SIC 2890) -- continued:</b>			
<b>Engineers.....</b>	3,630	3.9	(nc)
Chemical.....	1,260	1.3	3
Computer.....	30	<	3
Electrical/electronics.....	130	0.1	1
Industrial.....	560	0.6	1
Mechanical.....	450	0.5	3
Metallurgical/metallurgists.....	60	0.1	15
Safety.....	210	0.2	3
Sales.....	430	0.5	14
Other, n.e.c.....	500	0.5	(nc)
<b>Technicians.....</b>	5,510	5.9	(nc)
Computer programmer.....	110	0.1	7
Drafter.....	150	0.2	3
Electrical/electronics engineering technician.....	140	0.2	2
Mechanical engineering technicians.....	170	0.2	1
All other engineering technicians.....	780	0.8	(nc)
Physical and life science technicians.....	4,160	4.4	(nc)
Biological science technician.....	40	<	14
Chemical technicians, except health.....	3,980	4.2	3
All other physical and life science technicians.....	140	0.2	12
<b>Petroleum refining (SIC 2910)</b>			
<b>Scientific and technical personnel.....</b>	12,340	13.2	(nc)
<b>Scientists.....</b>	1,790	1.9	(nc)
Operations and systems researchers and analysts.....	50	0.1	0
All other mathematicians.....	30	<	(nc)
Physical scientists.....	870	0.9	(nc)
Chemists.....	530	0.6	2
All other physical scientists.....	340	0.4	(nc)
Social scientists.....	100	0.1	(nc)
Economists.....	90	0.1	16
All other social scientists.....	10	<	(nc)
Computer analysts.....	740	0.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	670	0.7	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Petroleum refining (SIC 2910) -- continued:</b>			
<b>Engineers.....</b>	5,530	5.9	(nc)
Chemical.....	1,100	1.2	2
Civil.....	160	0.2	2
Computer.....	100	0.1	1
Electrical/electronics.....	170	0.2	2
Industrial.....	590	0.6	8
Mechanical.....	520	0.6	1
Safety.....	370	0.4	<
Sales.....	130	0.1	2
Other, n.e.c.....	2,390	2.6	(nc)
<b>Technicians.....</b>	4,350	4.7	(nc)
Computer programmer.....	160	0.2	4
Drafter.....	220	0.2	2
Electrical/electronics engineering technician.....	290	0.3	2
Mechanical engineering technicians.....	120	0.1	3
All other engineering technicians.....	760	0.8	(nc)
Physical and life science technicians.....	2,800	3	(nc)
Chemical technicians, except health.....	1,490	1.6	2
All other physical and life science technicians.....	1,310	1.4	(nc)
<b>Asphalt paving and roofing materials (SIC 2950)</b>			
<b>Scientific and technical personnel.....</b>	670	2.3	(nc)
<b>Scientists.....</b>	90	0.3	(nc)
Physical scientists.....	50	0.2	10
Chemists.....	50	0.2	10
Computer analysts.....	40	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	80	0.3	5
<b>Engineers.....</b>	210	0.7	(nc)
Civil.....	40	0.1	19
Mechanical.....	40	0.1	14
Sales.....	40	0.1	0
Other, n.e.c.....	90	0.3	(nc)
<b>Technicians.....</b>	290	1	(nc)
All other engineering technicians.....	110	0.4	(nc)
Physical and life science technicians.....	180	0.6	9
Chemical technicians, except health.....	180	0.6	9

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. petroleum and coal products (SIC 2990)</b>			
<b>Scientific and technical personnel.....</b>	1,390	9.6	(nc)
<b>Scientists.....</b>	400	2.8	(nc)
Physical scientists.....	330	2.3	3
Chemists.....	330	2.3	3
Computer analysts.....	70	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	120	0.8	4
<b>Engineers.....</b>	310	2.1	(nc)
Chemical.....	110	0.8	3
Mechanical.....	40	0.3	4
Sales.....	60	0.4	7
Other, n.e.c.....	100	0.7	(nc)
<b>Technicians.....</b>	560	3.9	(nc)
All other engineering technicians.....	200	1.4	(nc)
Physical and life science technicians.....	360	2.5	(nc)
Chemical technicians, except health.....	300	2.1	5
All other physical and life science technicians.....	60	0.4	18
<b>Tires and inner tubes (SIC 3010)</b>			
<b>Scientific and technical personnel.....</b>	3,060	4	(nc)
<b>Scientists.....</b>	240	0.3	(nc)
Physical scientists.....	130	0.2	0
Chemists.....	130	0.2	0
Computer analysts.....	110	0.1	0
<b>Managers of scientific and technical personnel.....</b>	220	0.3	<
<b>Engineers.....</b>	1,300	1.7	(nc)
Chemical.....	300	0.4	0
Electrical/electronics.....	280	0.4	0
Industrial.....	270	0.4	0
Mechanical.....	210	0.3	0
Other, n.e.c.....	240	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Tires and inner tubes (SIC 3010) -- continued:</b>			
<b>Technicians.....</b>	1,300	1.7	(nc)
Computer programmer.....	60	0.1	0
Drafter.....	50	0.1	0
Electrical/electronics engineering technician.....	80	0.1	0
Mechanical engineering technicians.....	150	0.2	0
All other engineering technicians.....	560	0.7	(nc)
Physical and life science technicians.....	400	0.5	(nc)
Chemical technicians, except health.....	300	0.4	0
All other physical and life science technicians.....	100	0.1	0
<b>Rubber and plastics footwear (SIC 3020)</b>			
<b>Scientific and technical personnel.....</b>	140	2.4	(nc)
<b>Scientists.....</b>	100	1.7	(nc)
Physical scientists.....	10	0.2	(nc)
All other physical scientists.....	10	0.2	(nc)
Computer analysts.....	90	1.6	(nc)
<b>Engineers.....</b>	40	0.7	(nc)
Other, n.e.c.....	40	0.7	(nc)
<b>Hose &amp; belting &amp; gaskets &amp; packing (SIC 3050)</b>			
<b>Scientific and technical personnel.....</b>	4,380	6.2	(nc)
<b>Scientists.....</b>	430	0.6	(nc)
Physical scientists.....	110	0.2	2
Chemists.....	110	0.2	2
Social scientists.....	70	0.1	(nc)
All other social scientists.....	70	0.1	(nc)
Computer analysts.....	250	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	480	0.7	2
<b>Engineers.....</b>	1,870	2.7	(nc)
Chemical.....	170	0.2	5
Computer.....	60	0.1	2
Electrical/electronics.....	50	0.1	5
Industrial.....	310	0.4	2
Mechanical.....	670	1	2
Sales.....	140	0.2	2
Other, n.e.c.....	470	0.7	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Hose &amp; belting &amp; gaskets &amp; packing (SIC 3050) -- continued:</b>			
<b>Technicians.....</b>	1,600	2.3	(nc)
Drafter.....	310	0.4	3
Electrical/electronics engineering technician.....	90	0.1	2
Mechanical engineering technicians.....	300	0.4	7
All other engineering technicians.....	670	1	(nc)
Physical and life science technicians.....	230	0.3	3
Chemical technicians, except health.....	230	0.3	3
<b>Fabricated rubber products, n.e.c. (SIC 3060)</b>			
<b>Scientific and technical personnel.....</b>	4,920	4.4	(nc)
<b>Scientists.....</b>	440	0.4	(nc)
Physical scientists.....	300	0.3	4
Chemists.....	300	0.3	4
Computer analysts.....	140	0.1	2
<b>Managers of scientific and technical personnel.....</b>	650	0.6	6
<b>Engineers.....</b>	1,850	1.7	(nc)
Chemical.....	140	0.1	15
Computer.....	50	<	9
Electrical/electronics.....	70	0.1	5
Industrial.....	320	0.3	3
Mechanical.....	690	0.6	3
Sales.....	130	0.1	3
Other, n.e.c.....	450	0.4	(nc)
<b>Technicians.....</b>	1,980	1.8	(nc)
Computer programmer.....	170	0.2	5
Drafter.....	220	0.2	3
Electrical/electronics engineering technician.....	70	0.1	5
Mechanical engineering technicians.....	310	0.3	3
All other engineering technicians.....	490	0.4	(nc)
Physical and life science technicians.....	720	0.6	(nc)
Chemical technicians, except health.....	580	0.5	5
All other physical and life science technicians.....	140	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous plastics products, n.e.c. (SIC 3080) -- continued:</b>			
<b>Scientific and technical personnel.....</b>	27,670	3.7	(nc)
<b>Scientists.....</b>	1,640	0.2	(nc)
Physical scientists.....	650	0.1	(nc)
Chemists.....	450	0.1	7
All other physical scientists.....	200	<	(nc)
Life scientists.....	50	<	(nc)
All other life scientists.....	50	<	(nc)
Computer analysts.....	940	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	3,650	0.5	3
<b>Engineers.....</b>	12,820	1.7	(nc)
Chemical.....	950	0.1	5
Computer.....	360	0.1	7
Electrical/electronics.....	450	0.1	5
Industrial.....	2,650	0.4	2
Mechanical.....	3,990	0.5	2
Sales.....	960	0.1	5
Other, n.e.c.....	3,460	0.5	(nc)
<b>Technicians.....</b>	9,560	1.3	(nc)
Computer programmer.....	710	0.1	(nc)
Drafter.....	1,540	0.2	3
Electrical/electronics engineering technician.....	720	0.1	3
Mechanical engineering technicians.....	1,380	0.2	4
All other engineering technicians.....	3,180	0.4	(nc)
Physical and life science technicians.....	2,030	0.3	(nc)
Chemical technicians, except health.....	1,760	0.2	5
All other physical and life science technicians.....	270	<	(nc)
<b>Leather tanning and finishing (SIC 3110)</b>			
<b>Scientific and technical personnel.....</b>	370	2.9	(nc)
<b>Scientists.....</b>	60	0.5	(nc)
Computer analysts.....	60	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	40	0.3	6
<b>Engineers.....</b>	30	0.2	(nc)
Other, n.e.c.....	30	0.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Leather tanning and finishing (SIC 3110) -- continued:</b>			
<b>Technicians.....</b>	240	1.9	(nc)
All other engineering technicians.....	40	0.3	(nc)
Physical and life science technicians.....	200	1.6	(nc)
Chemical technicians, except health.....	50	0.4	9
All other physical and life science technicians.....	150	1.2	2
<b>Footwear, except rubber (SIC 3140)</b>			
<b>Scientific and technical personnel.....</b>	310	0.9	(nc)
<b>Scientists.....</b>	100	0.3	(nc)
Computer analysts.....	100	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	60	0.2	0
<b>Engineers.....</b>	70	0.2	(nc)
Industrial.....	30	0.1	7
Other, n.e.c.....	40	0.1	(nc)
<b>Technicians.....</b>	80	0.2	(nc)
Computer programmer.....	30	0.1	0
All other engineering technicians.....	50	0.1	3
<b>Luggage (SIC 3160)</b>			
<b>Scientific and technical personnel.....</b>	140	1.5	(nc)
<b>Scientists.....</b>	50	0.5	(nc)
Computer analysts.....	50	0.5	(nc)
<b>Engineers.....</b>	50	0.5	(nc)
Other, n.e.c.....	50	0.5	(nc)
<b>Technicians.....</b>	40	0.4	(nc)
All other engineering technicians.....	40	0.4	(nc)
<b>Handbags and personal leather goods (SIC 3170)</b>			
<b>Scientific and technical personnel.....</b>	40	0.5	(nc)
<b>Scientists.....</b>	40	0.5	(nc)
Computer analysts.....	40	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Leather goods, n.e.c. (SIC 3190)</b>			
<b>Scientific and technical personnel</b> .....	70	0.6	(nc)
<b>Engineers</b> .....	40	0.3	(nc)
Other, n.e.c. ....	40	0.3	(nc)
<b>Technicians</b> .....	30	0.2	(nc)
All other engineering technicians.....	30	0.2	(nc)
<b>Flat glass (SIC 3210)</b>			
<b>Scientific and technical personnel</b> .....	720	4.3	(nc)
<b>Scientists</b> .....	80	0.5	(nc)
Physical scientists.....	10	0.1	(nc)
All other physical scientists.....	10	0.1	(nc)
Computer analysts.....	70	0.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	50	0.3	0
<b>Engineers</b> .....	340	2.1	(nc)
Electrical/electronics.....	40	0.2	0
Industrial.....	50	0.3	0
Mechanical.....	40	0.2	0
Other, n.e.c. ....	210	1.3	(nc)
<b>Technicians</b> .....	250	1.5	(nc)
Computer programmer.....	40	0.2	0
Electrical/electronics engineering technician.....	70	0.4	0
All other engineering technicians.....	80	0.5	(nc)
Physical and life science technicians.....	60	0.4	(nc)
All other physical and life science technicians.....	60	0.4	(nc)
<b>Glass and glassware, pressed or blown (SIC 3220)</b>			
<b>Scientific and technical personnel</b> .....	3,660	5.3	(nc)
<b>Scientists</b> .....	490	0.7	(nc)
Computer analysts.....	490	0.7	(nc)
<b>Managers of scientific and technical personnel</b> .....	260	0.4	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Glass and glassware, pressed or blown (SIC 3220) -- continued:</b>			
<b>Engineers.....</b>	1,960	2.8	(nc)
Chemical.....	90	0.1	2
Computer.....	300	0.4	0
Electrical/electronics.....	70	0.1	1
Industrial.....	230	0.3	1
Mechanical.....	490	0.7	1
Metallurgical/metallurgists.....	90	0.1	5
Sales.....	50	0.1	10
Other, n.e.c.....	640	0.9	(nc)
<b>Technicians.....</b>	950	1.4	(nc)
Computer programmer.....	100	0.1	(nc)
Drafter.....	60	0.1	0
Electrical/electronics engineering technician.....	130	0.2	0
Mechanical engineering technicians.....	200	0.3	1
All other engineering technicians.....	380	0.6	(nc)
Physical and life science technicians.....	80	0.1	(nc)
Chemical technicians, except health.....	40	0.1	4
All other physical and life science technicians.....	40	0.1	0
<b>Products of purchased glass (SIC 3230)</b>			
<b>Scientific and technical personnel.....</b>	1,900	2.9	(nc)
<b>Scientists.....</b>	110	0.2	(nc)
Computer analysts.....	110	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	160	0.2	2
<b>Engineers.....</b>	1,040	1.6	(nc)
Electrical/electronics.....	120	0.2	37
Industrial.....	250	0.4	3
Mechanical.....	310	0.5	15
Other, n.e.c.....	360	0.5	(nc)
<b>Technicians.....</b>	590	0.9	(nc)
Computer programmer.....	70	0.1	10
Drafter.....	130	0.2	6
Electrical/electronics engineering technician.....	60	0.1	0
Mechanical engineering technicians.....	100	0.2	1
All other engineering technicians.....	220	0.3	(nc)
Physical and life science technicians.....	10	<	(nc)
All other physical and life science technicians.....	10	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Cement, hydraulic (SIC 3240)</b>			
<b>Scientific and technical personnel</b> .....	1,480	8.4	(nc)
<b>Scientists</b> .....	260	1.5	(nc)
Physical scientists.....	140	0.8	3
Chemists.....	140	0.8	3
Computer analysts.....	120	0.7	(nc)
<b>Managers of scientific and technical personnel</b> .....	110	0.6	2
<b>Engineers</b> .....	440	2.5	(nc)
Chemical.....	40	0.2	3
Civil.....	40	0.2	0
Electrical/electronics.....	70	0.4	2
Industrial.....	120	0.7	1
Mechanical.....	60	0.3	0
Other, n.e.c.....	110	0.6	(nc)
<b>Technicians</b> .....	670	3.8	(nc)
Computer programmer.....	40	0.2	4
Electrical/electronics engineering technician.....	90	0.5	5
Civil engineering technician.....	40	0.2	0
All other engineering technicians.....	90	0.5	(nc)
Physical and life science technicians.....	410	2.3	(nc)
Chemical technicians, except health.....	360	2	1
All other physical and life science technicians.....	50	0.3	11
<b>Structural clay products (SIC 3250)</b>			
<b>Scientific and technical personnel</b> .....	870	2.7	(nc)
<b>Scientists</b> .....	80	0.2	(nc)
Computer analysts.....	80	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	90	0.3	15
<b>Engineers</b> .....	420	1.3	(nc)
Mechanical.....	40	0.1	6
Metallurgical/metallurgists.....	170	0.5	5
Sales.....	80	0.2	0
Other, n.e.c.....	130	0.4	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Structural clay products (SIC 3250) -- continued:</b>			
<b>Technicians.....</b>	280	0.9	(nc)
Computer programmer.....	40	0.1	6
Drafter.....	30	0.1	5
All other engineering technicians.....	210	0.6	(nc)
<b>Pottery and related products (SIC 3260)</b>			
<b>Scientific and technical personnel.....</b>	1,500	3.9	(nc)
<b>Scientists.....</b>	140	0.4	(nc)
Computer analysts.....	140	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	140	0.4	2
<b>Engineers.....</b>	600	1.6	(nc)
Industrial.....	180	0.5	2
Mechanical.....	90	0.2	2
Metallurgical/metallurgists.....	170	0.4	3
Sales.....	60	0.2	11
Other, n.e.c.....	100	0.3	(nc)
<b>Technicians.....</b>	620	1.6	(nc)
Drafter.....	40	0.1	3
Electrical/electronics engineering technician.....	50	0.1	0
Mechanical engineering technicians.....	40	0.1	0
All other engineering technicians.....	430	1.1	(nc)
Physical and life science technicians.....	60	0.2	4
Chemical technicians, except health.....	60	0.2	4
<b>Concrete, gypsum, and plaster products (SIC 3270)</b>			
<b>Scientific and technical personnel.....</b>	3,580	1.6	(nc)
<b>Scientists.....</b>	220	0.1	(nc)
Physical scientists.....	70	<	12
Chemists.....	70	<	12
Computer analysts.....	150	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	400	0.2	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Concrete, gypsum, and plaster products (SIC 3270) -- continued:</b>			
Engineers.....	1,320	0.6	(nc)
Chemical.....	50	<	10
Civil.....	320	0.1	9
Electrical/electronics.....	40	<	4
Industrial.....	250	0.1	1
Mechanical.....	130	0.1	5
Sales.....	270	0.1	5
Other, n.e.c.....	260	0.1	(nc)
Technicians.....	1,640	0.7	(nc)
Computer programmer.....	70	<	10
Drafter.....	1,150	0.5	5
Civil engineering technician.....	60	<	10
All other engineering technicians.....	210	0.1	(nc)
Physical and life science technicians.....	150	0.1	5
Chemical technicians, except health.....	150	0.1	5
<b>Cut stone and stone products (SIC 3280)</b>			
Scientific and technical personnel.....	310	1.9	6
Technicians.....	310	1.9	6
Drafter.....	310	1.9	6
<b>Misc. nonmetallic mineral products (SIC 3290)</b>			
Scientific and technical personnel.....	3,250	4.2	(nc)
Scientists.....	360	0.5	(nc)
Physical scientists.....	150	0.2	(nc)
Chemists.....	100	0.1	5
All other physical scientists.....	50	0.1	(nc)
Computer analysts.....	210	0.3	(nc)
Managers of scientific and technical personnel.....	270	0.4	4
Engineers.....	1,550	2	(nc)
Chemical.....	60	0.1	7
Computer.....	30	<	5
Electrical/electronics.....	80	0.1	6
Industrial.....	320	0.4	10
Mechanical.....	310	0.4	6
Metallurgical/metallurgists.....	170	0.2	9
Sales.....	200	0.3	2
Other, n.e.c.....	380	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. nonmetallic mineral products (SIC 3290) -- continued:</b>			
Technicians.....	1,070	1.4	(nc)
Computer programmer.....	40	0.1	3
Drafter.....	200	0.3	1
Electrical/electronics engineering technician.....	100	0.1	1
Mechanical engineering technicians.....	40	0.1	16
All other engineering technicians.....	440	0.6	(nc)
Physical and life science technicians.....	250	0.3	10
Chemical technicians, except health.....	250	0.3	10

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.3. Employed scientists, engineers, technicians (SETs), and SET managers,  
in SICs 33-39 (selected manufacturing industries, continued),  
and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Blast furnace and basic steel products (SIC 3310)</b>			
<b>Scientific and technical personnel</b> .....	12,670	5.6	(nc)
<b>Scientists</b> .....	2,060	0.9	(nc)
Physical scientists.....	680	0.3	(nc)
Chemists.....	360	0.2	6
All other physical scientists.....	320	0.1	2
Computer analysts.....	1,380	0.6	(nc)
<b>Managers of scientific and technical personnel</b> .....	870	0.4	2
<b>Engineers</b> .....	6,260	2.8	(nc)
Computer.....	440	0.2	6
Electrical/electronics.....	610	0.3	1
Industrial.....	750	0.3	3
Mechanical.....	1,060	0.5	2
Metallurgical/metallurgists.....	1,370	0.6	4
Safety.....	240	0.1	8
Sales.....	230	0.1	5
Other, n.e.c.....	1,560	0.7	(nc)
<b>Technicians</b> .....	3,480	1.5	(nc)
Computer programmer.....	400	0.2	9
Drafter.....	400	0.2	3
Electrical/electronics engineering technician.....	600	0.3	13
Mechanical engineering technicians.....	250	0.1	3
All other engineering technicians.....	910	0.4	(nc)
Physical and life science technicians.....	920	0.4	(nc)
Chemical technicians, except health.....	780	0.3	4
All other physical and life science technicians.....	140	0.1	0
<b>Iron and steel foundries (SIC 3320)</b>			
<b>Scientific and technical personnel</b> .....	4,830	3.7	(nc)
<b>Scientists</b> .....	240	0.2	(nc)
Physical scientists.....	110	0.1	(nc)
All other physical scientists.....	110	0.1	(nc)
Computer analysts.....	130	0.1	9
<b>Managers of scientific and technical personnel</b> .....	400	0.3	4

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Iron and steel foundries (SIC 3320) -- continued:</b>			
<b>Engineers.....</b>	2,760	2.1	(nc)
Computer.....	50	<	5
Electrical/electronics.....	60	0.1	2
Industrial.....	570	0.4	2
Mechanical.....	440	0.3	1
Metallurgical/metallurgists.....	560	0.4	3
Safety.....	110	0.1	4
Sales.....	360	0.3	8
Other, n.e.c.....	610	0.5	(nc)
<b>Technicians.....</b>	1,430	1.1	(nc)
Computer programmer.....	130	0.1	3
Drafter.....	280	0.2	4
Electrical/electronics engineering technician.....	190	0.2	1
Mechanical engineering technicians.....	150	0.1	4
All other engineering technicians.....	450	0.3	(nc)
Physical and life science technicians.....	230	0.2	(nc)
Chemical technicians, except health.....	160	0.1	3
All other physical and life science technicians.....	70	0.1	2
<b>Primary nonferrous metals (SIC 3330)</b>			
<b>Scientific and technical personnel.....</b>	3,840	10	(nc)
<b>Scientists.....</b>	410	1.1	(nc)
Physical scientists.....	230	0.6	(nc)
Chemists.....	170	0.4	4
All other physical scientists.....	60	0.2	0
Computer analysts.....	180	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	190	0.5	1
<b>Engineers.....</b>	1,740	4.5	(nc)
Computer.....	160	0.4	0
Electrical/electronics.....	200	0.5	1
Industrial.....	120	0.3	0
Mechanical.....	330	0.9	0
Metallurgical/metallurgists.....	210	0.6	3
Safety.....	120	0.3	0
Sales.....	40	0.1	5
Other, n.e.c.....	560	1.5	0

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Primary nonferrous metals (SIC 3330) -- continued:</b>			
<b>Technicians.....</b>	1,500	3.9	(nc)
Computer programmer.....	40	0.1	0
Drafter.....	220	0.6	0
Electrical/electronics engineering technician.....	100	0.3	0
Mechanical engineering technicians.....	40	0.1	0
All other engineering technicians.....	250	0.7	(nc)
Physical and life science technicians.....	850	2.2	(nc)
Chemical technicians, except health.....	630	1.6	<
All other physical and life science technicians.....	220	0.6	(nc)
<b>Secondary nonferrous metals (SIC 3340)</b>			
<b>Scientific and technical personnel.....</b>	870	5.3	(nc)
<b>Scientists.....</b>	240	1.5	(nc)
Physical scientists.....	170	1	1
Chemists.....	170	1	1
Computer analysts.....	70	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	60	0.4	4
<b>Engineers.....</b>	260	1.6	(nc)
Mechanical.....	30	0.2	14
Metallurgical/metallurgists.....	110	0.7	5
Other, n.e.c.....	120	0.7	(nc)
<b>Technicians.....</b>	310	1.9	(nc)
All other engineering technicians.....	110	0.7	(nc)
Physical and life science technicians.....	200	1.2	(nc)
Chemical technicians, except health.....	150	0.9	15
All other physical and life science technicians.....	50	0.3	0
<b>Nonferrous rolling and drawing (SIC 3350)</b>			
<b>Scientific and technical personnel.....</b>	12,260	7.2	(nc)
<b>Scientists.....</b>	1,640	1	(nc)
Physical scientists.....	340	0.2	(nc)
Chemists.....	220	0.1	1
All other physical scientists.....	120	0.1	1
Life scientists.....	120	0.1	(nc)
All other life scientists.....	120	0.1	(nc)
Social scientists.....	160	0.1	(nc)
All other social scientists.....	160	0.1	(nc)
Computer analysts.....	1,020	0.6	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Nonferrous rolling and drawing (SIC 3350) -- continued:</b>			
Managers of scientific and technical personnel.....	1,180	0.7	2
<b>Engineers.....</b>	6,280	3.7	(nc)
Computer.....	80	0.1	4
Electrical/electronics.....	520	0.3	3
Industrial.....	1,410	0.8	2
Mechanical.....	740	0.4	4
Metallurgical/metallurgists.....	590	0.4	2
Safety.....	210	0.1	3
Sales.....	370	0.2	5
Other, n.e.c.....	2,360	1.4	(nc)
<b>Technicians.....</b>	3,160	1.9	(nc)
Computer programmer.....	220	0.1	4
Drafter.....	450	0.3	5
Electrical/electronics engineering technician.....	540	0.3	3
Mechanical engineering technicians.....	160	0.1	9
All other engineering technicians.....	970	0.6	(nc)
Physical and life science technicians.....	820	0.5	(nc)
Chemical technicians, except health.....	740	0.4	2
All other physical and life science technicians.....	80	0.1	8
<b>Nonferrous foundries (castings) (SIC 3360)</b>			
Scientific and technical personnel.....	2,990	3.2	(nc)
<b>Scientists.....</b>	100	0.1	(nc)
Computer analysts.....	100	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	320	0.3	2
<b>Engineers.....</b>	1,720	1.8	(nc)
Electrical/electronics.....	30	<	0
Industrial.....	330	0.4	1
Mechanical.....	660	0.7	4
Metallurgical/metallurgists.....	160	0.2	3
Safety.....	80	0.1	2
Sales.....	100	0.1	8
Other, n.e.c.....	360	0.4	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Nonferrous foundries (castings) (SIC 3360) -- continued:</b>			
<b>Technicians.....</b>	850	0.9	(nc)
Computer programmer.....	50	0.1	9
Drafter.....	120	0.1	3
Electrical/electronics engineering technician.....	70	0.1	13
Mechanical engineering technicians.....	150	0.2	12
All other engineering technicians.....	420	0.4	(nc)
Physical and life science technicians.....	40	<	(nc)
All other physical and life science technicians.....	40	<	(nc)
<b>Miscellaneous primary metal products (SIC 3390)</b>			
<b>Scientific and technical personnel.....</b>	1,850	6	(nc)
<b>Scientists.....</b>	120	0.4	(nc)
Physical scientists.....	50	0.2	0
Chemists.....	50	0.2	0
Computer analysts.....	70	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	210	0.7	3
<b>Engineers.....</b>	980	3.2	(nc)
Computer.....	40	0.1	6
Electrical/electronics.....	40	0.1	16
Industrial.....	110	0.4	11
Mechanical.....	270	0.9	4
Metallurgical/metallurgists.....	340	1.1	4
Sales.....	100	0.3	3
Other, n.e.c.....	80	0.3	(nc)
<b>Technicians.....</b>	540	1.8	(nc)
Computer programmer.....	40	0.1	0
Drafter.....	40	0.1	3
Electrical/electronics engineering technician.....	80	0.3	4
Mechanical engineering technicians.....	30	0.1	0
All other engineering technicians.....	190	0.6	(nc)
Physical and life science technicians.....	160	0.5	1
Chemical technicians, except health.....	160	0.5	1

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Metal cans and shipping containers (SIC 3410)</b>			
<b>Scientific and technical personnel</b> .....	720	2	(nc)
<b>Scientists</b> .....	80	0.2	(nc)
Computer analysts.....	80	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	140	0.4	3
<b>Engineers</b> .....	260	0.7	(nc)
Electrical/electronics.....	40	0.1	5
Industrial.....	60	0.2	12
Mechanical.....	100	0.3	7
Other, n.e.c.....	60	0.2	(nc)
<b>Technicians</b> .....	240	0.7	(nc)
Drafter.....	40	0.1	11
Electrical/electronics engineering technician.....	160	0.4	3
All other engineering technicians.....	40	0.1	(nc)
<b>Cutlery, hand tools, and hardware (SIC 3420)</b>			
<b>Scientific and technical personnel</b> .....	5,180	4.1	(nc)
<b>Scientists</b> .....	280	0.2	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Computer analysts.....	250	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	600	0.5	3
<b>Engineers</b> .....	2,670	2.1	(nc)
Computer.....	80	0.1	9
Electrical/electronics.....	100	0.1	8
Industrial.....	650	0.5	1
Mechanical.....	970	0.8	3
Metallurgical/metallurgists.....	170	0.1	3
Safety.....	110	0.1	1
Sales.....	100	0.1	8
Other, n.e.c.....	490	0.4	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Cutlery, hand tools, and hardware (SIC 3420) -- continued:</b>			
<b>Technicians.....</b>	1,630	1.3	(nc)
Computer programmer.....	320	0.3	(nc)
Drafter.....	540	0.4	3
Electrical/electronics engineering technician.....	110	0.1	10
Mechanical engineering technicians.....	260	0.2	1
All other engineering technicians.....	400	0.3	(nc)
<b>Plumbing and heating, except electric (SIC 3430)</b>			
<b>Scientific and technical personnel.....</b>	2,450	4.8	(nc)
<b>Scientists.....</b>	190	0.4	(nc)
Computer analysts.....	190	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	310	0.6	3
<b>Engineers.....</b>	1,100	2.1	(nc)
Electrical/electronics.....	50	0.1	11
Industrial.....	210	0.4	4
Mechanical.....	500	1	2
Metallurgical/metallurgists.....	60	0.1	4
Safety.....	40	0.1	3
Sales.....	110	0.2	8
Other, n.e.c.....	130	0.3	(nc)
<b>Technicians.....</b>	850	1.6	(nc)
Computer programmer.....	150	0.3	6
Drafter.....	320	0.6	4
Electrical/electronics engineering technician.....	60	0.1	21
Mechanical engineering technicians.....	120	0.2	7
All other engineering technicians.....	200	0.4	(nc)
<b>Fabricated structural metal products (SIC 3440)</b>			
<b>Scientific and technical personnel.....</b>	23,820	5	(nc)
<b>Scientists.....</b>	480	0.1	(nc)
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	460	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Fabricated structural metal products (SIC 3440) -- continued:</b>			
Managers of scientific and technical personnel.....	1,730	0.4	2
<b>Engineers.....</b>			
Civil.....	8,550	1.8	(nc)
Computer.....	1,040	0.2	3
Computer.....	240	0.1	6
Electrical/electronics.....	210	<	27
Industrial.....	1,140	0.2	4
Mechanical.....	2,890	0.6	4
Metallurgical/metallurgists.....	170	<	3
Safety.....	180	<	2
Sales.....	1,190	0.3	5
Other, n.e.c.....	1,490	0.3	(nc)
<b>Technicians.....</b>			
Computer programmer.....	13,060	2.8	(nc)
Drafter.....	1,210	0.3	(nc)
Electrical/electronics engineering technician.....	9,660	2	2
Mechanical engineering technicians.....	270	0.1	5
All other engineering technicians.....	510	0.1	12
All other engineering technicians.....	1,410	0.3	(nc)
<b>Screw machine products, bolts, etc. (SIC 3450)</b>			
Scientific and technical personnel.....	3,230	3	(nc)
<b>Scientists.....</b>			
Computer analysts.....	100	0.1	6
Computer analysts.....	100	0.1	6
Managers of scientific and technical personnel.....	430	0.4	4
<b>Engineers.....</b>			
Computer.....	1,730	1.6	(nc)
Computer.....	30	<	18
Electrical/electronics.....	50	0.1	7
Industrial.....	300	0.3	4
Mechanical.....	750	0.7	3
Metallurgical/metallurgists.....	100	0.1	3
Sales.....	200	0.2	7
Other, n.e.c.....	300	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Screw machine products, bolts, etc. (SIC 3450) -- continued:</b>			
<b>Technicians.....</b>	970	0.9	(nc)
Computer programmer.....	170	0.2	(nc)
Drafter.....	340	0.3	4
Electrical/electronics engineering technician.....	50	0.1	3
Mechanical engineering technicians.....	150	0.1	5
All other engineering technicians.....	260	0.3	(nc)
<b>Metal forgings and stampings (SIC 3460)</b>			
<b>Scientific and technical personnel.....</b>	9,580	3.6	(nc)
<b>Scientists.....</b>	280	0.1	(nc)
Computer analysts.....	280	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,060	0.4	6
<b>Engineers.....</b>	5,470	2.1	(nc)
Computer.....	110	<	6
Electrical/electronics.....	250	0.1	21
Industrial.....	1,150	0.4	3
Mechanical.....	1,930	0.7	7
Metallurgical/metallurgists.....	300	0.1	6
Safety.....	100	<	5
Sales.....	350	0.1	4
Other, n.e.c.....	1,280	0.5	(nc)
<b>Technicians.....</b>	2,770	1	(nc)
Computer programmer.....	510	0.2	(nc)
Drafter.....	720	0.3	6
Electrical/electronics engineering technician.....	200	0.1	4
Mechanical engineering technicians.....	300	0.1	14
All other engineering technicians.....	1,040	0.4	(nc)
<b>Metal services, n.e.c. (SIC 3470)</b>			
<b>Scientific and technical personnel.....</b>	2,330	1.6	(nc)
<b>Scientists.....</b>	190	0.1	(nc)
Physical scientists.....	90	0.1	(nc)
All other physical scientists.....	90	0.1	(nc)
Computer analysts.....	100	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	260	0.2	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Metal services, n.e.c. (SIC 3470) -- continued:</b>			
<b>Engineers.....</b>	1,220	0.9	(nc)
Computer.....	40	<	9
Electrical/electronics.....	90	0.1	19
Industrial.....	220	0.2	7
Mechanical.....	330	0.2	6
Metallurgical/metallurgists.....	140	0.1	5
Safety.....	120	0.1	23
Sales.....	140	0.1	17
Other, n.e.c.....	140	0.1	(nc)
<b>Technicians.....</b>	660	0.5	(nc)
Computer programmer.....	50	<	13
Drafter.....	100	0.1	19
Electrical/electronics engineering technician.....	50	<	15
Mechanical engineering technicians.....	80	0.1	13
All other engineering technicians.....	160	0.1	(nc)
Physical and life science technicians.....	220	0.2	(nc)
Chemical technicians, except health.....	60	<	12
All other physical and life science technicians.....	160	0.1	7
<b>Ordnance and accessories, n.e.c. (SIC 3480)</b>			
<b>Scientific and technical personnel.....</b>	5,260	12.9	(nc)
<b>Scientists.....</b>	380	0.9	(nc)
Physical scientists.....	50	0.1	(nc)
All other physical scientists.....	50	0.1	(nc)
Computer analysts.....	330	0.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	280	0.7	<
<b>Engineers.....</b>	3,480	8.5	(nc)
Industrial.....	310	0.8	0
Mechanical.....	750	1.8	1
Metallurgical/metallurgists.....	40	0.1	0
Safety.....	110	0.3	1
Other, n.e.c.....	2,270	5.6	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Ordnance and accessories, n.e.c. (SIC 3480) -- continued:</b>			
<b>Technicians.....</b>	1,120	2.8	(nc)
Computer programmer.....	260	0.6	(nc)
Drafter.....	120	0.3	1
Electrical/electronics engineering technician.....	260	0.6	0
Mechanical engineering technicians.....	100	0.2	0
All other engineering technicians.....	300	0.7	(nc)
Physical and life science technicians.....	80	0.2	(nc)
All other physical and life science technicians.....	80	0.2	(nc)
<b>Misc. fabricated metal products (SIC 3490)</b>			
<b>Scientific and technical personnel.....</b>	13,450	5	(nc)
<b>Scientists.....</b>	510	0.2	(nc)
Physical scientists.....	50	<	(nc)
All other physical scientists.....	50	<	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	450	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,430	0.5	2
<b>Engineers.....</b>	6,860	2.6	(nc)
Computer.....	140	0.1	5
Electrical/electronics.....	310	0.1	9
Industrial.....	1,060	0.4	3
Mechanical.....	3,080	1.1	3
Metallurgical/metallurgists.....	330	0.1	6
Safety.....	230	0.1	7
Sales.....	690	0.3	4
Other, n.e.c.....	1,020	0.4	(nc)
<b>Technicians.....</b>	4,650	1.8	(nc)
Computer programmer.....	690	0.3	(nc)
Drafter.....	1,660	0.6	1
Electrical/electronics engineering technician.....	420	0.2	7
Mechanical engineering technicians.....	690	0.3	4
All other engineering technicians.....	1,120	0.4	(nc)
Physical and life science technicians.....	70	<	(nc)
All other physical and life science technicians.....	70	<	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Engines and turbines (SIC 3510)</b>			
<b>Scientific and technical personnel</b> .....	11,350	13.7	(nc)
<b>Scientists</b> .....	490	0.6	(nc)
Computer analysts.....	490	0.6	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,100	1.3	1
<b>Engineers</b> .....	7,220	8.8	(nc)
Chemical.....	50	0.1	0
Computer.....	120	0.2	0
Electrical/electronics.....	420	0.5	3
Industrial.....	1,070	1.3	1
Mechanical.....	3,080	3.7	1
Metallurgical/metallurgists.....	100	0.1	0
Sales.....	380	0.5	3
Other, n.e.c.....	2,000	2.4	(nc)
<b>Technicians</b> .....	2,540	3.1	(nc)
Computer programmer.....	90	0.1	2
Drafter.....	530	0.6	1
Mechanical engineering technicians.....	920	1.1	1
All other engineering technicians.....	950	1.2	(nc)
Physical and life science technicians.....	50	0.1	3
Chemical technicians, except health.....	50	0.1	3
<b>Farm and garden machinery (SIC 3520)</b>			
<b>Scientific and technical personnel</b> .....	6,820	6.8	(nc)
<b>Scientists</b> .....	450	0.5	(nc)
Operations and systems researchers and analysts.....	80	0.1	0
Computer analysts.....	370	0.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	780	0.8	1
<b>Engineers</b> .....	3,330	3.3	(nc)
Agricultural.....	640	0.6	1
Computer.....	80	0.1	7
Electrical/electronics.....	180	0.2	5
Industrial.....	540	0.5	2
Mechanical.....	1,270	1.3	2
Sales.....	160	0.2	6
Other, n.e.c.....	460	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Farm and garden machinery (SIC 3520) -- continued:</b>			
<b>Technicians</b> .....	2,260	2.2	(nc)
Computer programmer.....	260	0.3	(nc)
Drafter.....	830	0.8	2
Electrical/electronics engineering technician.....	160	0.2	5
Mechanical engineering technicians.....	640	0.6	<
All other engineering technicians.....	370	0.4	(nc)
<b>Construction and related machinery (SIC 3530)</b>			
<b>Scientific and technical personnel</b> .....	24,440	9.7	(nc)
<b>Scientists</b> .....	670	0.3	(nc)
Operations and systems researchers and analysts.....	150	0.1	3
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Social scientists.....	50	<	(nc)
All other social scientists.....	50	<	(nc)
Computer analysts.....	440	0.2	2
<b>Managers of scientific and technical personnel</b> .....	2,050	0.8	4
<b>Engineers</b> .....	13,540	5.4	(nc)
Agricultural.....	420	0.2	14
Chemical.....	300	0.1	3
Civil.....	50	<	4
Computer.....	440	0.2	12
Electrical/electronics.....	1,550	0.6	3
Industrial.....	1,380	0.6	3
Mechanical.....	6,200	2.5	3
Metallurgical/metallurgists.....	150	0.1	10
Sales.....	1,660	0.7	5
Other, n.e.c.....	1,390	0.6	(nc)
<b>Technicians</b> .....	8,180	3.3	(nc)
Computer programmer.....	850	0.3	(nc)
Drafter.....	3,970	1.6	1
Electrical/electronics engineering technician.....	980	0.4	4
Mechanical engineering technicians.....	1,180	0.5	3
All other engineering technicians.....	1,040	0.4	(nc)
Physical and life science technicians.....	160	0.1	9
Chemical technicians, except health.....	160	0.1	9

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Metalworking machinery (SIC 3540)</b>			
<b>Scientific and technical personnel</b> .....	30,280	8.6	(nc)
<b>Scientists</b> .....	650	0.2	(nc)
Operations and systems researchers and analysts.....	50	<	0
Physical scientists.....	50	<	(nc)
All other physical scientists.....	50	<	(nc)
Computer analysts.....	550	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	2,390	0.7	2
<b>Engineers</b> .....	15,150	4.3	(nc)
Chemical.....	60	<	9
Computer.....	780	0.2	5
Electrical/electronics.....	1,860	0.5	2
Industrial.....	1,510	0.4	2
Mechanical.....	6,160	1.8	2
Metallurgical/metallurgists.....	270	0.1	6
Sales.....	2,540	0.7	4
Other, n.e.c.....	1,970	0.6	(nc)
<b>Technicians</b> .....	12,090	3.5	(nc)
Computer programmer.....	3,690	1.1	(nc)
Drafter.....	4,600	1.3	4
Electrical/electronics engineering technician.....	1,280	0.4	4
Mechanical engineering technicians.....	1,060	0.3	3
All other engineering technicians.....	1,360	0.4	(nc)
Physical and life science technicians.....	100	<	(nc)
Chemical technicians, except health.....	60	<	4
All other physical and life science technicians.....	40	<	0

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Special industry machinery (SIC 3550)</b>			
<b>Scientific and technical personnel.....</b>	29,920	17.2	(nc)
<b>Scientists.....</b>	780	0.5	(nc)
Operations and systems researchers and analysts.....	180	0.1	3
Physical scientists.....	60	<	(nc)
All other physical scientists.....	60	<	(nc)
Computer analysts.....	540	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	2,400	1.4	2
<b>Engineers.....</b>	15,600	9	(nc)
Chemical.....	80	0.1	7
Computer.....	980	0.6	4
Electrical/electronics.....	3,070	1.8	2
Industrial.....	1,070	0.6	2
Mechanical.....	5,820	3.4	1
Metallurgical/metallurgists.....	310	0.2	2
Sales.....	2,040	1.2	2
Other, n.e.c.....	2,230	1.3	(nc)
<b>Technicians.....</b>	11,140	6.4	(nc)
Computer programmer.....	1,130	0.7	(nc)
Drafter.....	3,370	1.9	1
Electrical/electronics engineering technician.....	3,050	1.8	4
Mechanical engineering technicians.....	1,620	0.9	5
All other engineering technicians.....	1,870	1.1	(nc)
Physical and life science technicians.....	100	0.1	7
Chemical technicians, except health.....	100	0.1	7
<b>General industrial machinery (SIC 3560)</b>			
<b>Scientific and technical personnel.....</b>	31,560	11.9	(nc)
<b>Scientists.....</b>	1,150	0.4	(nc)
Operations and systems researchers and analysts.....	80	<	0
Physical scientists.....	190	0.1	(nc)
All other physical scientists.....	190	0.1	(nc)
Computer analysts.....	880	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	3,000	1.1	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>General industrial machinery (SIC 3560) -- continued:</b>			
<b>Engineers.....</b>	17,250	6.5	(nc)
Chemical.....	390	0.2	4
Civil.....	70	<	4
Computer.....	560	0.2	7
Electrical/electronics.....	2,170	0.8	4
Industrial.....	2,150	0.8	1
Mechanical.....	6,990	2.6	2
Metallurgical/metallurgists.....	270	0.1	2
Sales.....	2,720	1	2
Other, n.e.c.....	1,930	0.7	(nc)
<b>Technicians.....</b>	10,160	3.8	(nc)
Computer programmer.....	1,170	0.4	(nc)
Drafter.....	4,050	1.5	2
Electrical/electronics engineering technician.....	1,140	0.4	5
Mechanical engineering technicians.....	1,420	0.5	2
All other engineering technicians.....	1,910	0.7	(nc)
Physical and life science technicians.....	470	0.2	(nc)
Chemical technicians, except health.....	260	0.1	5
All other physical and life science technicians.....	210	0.1	1
<b>Computer and office equipment (SIC 3570)</b>			
<b>Scientific and technical personnel.....</b>	134,390	35.4	(nc)
<b>Scientists.....</b>	8,200	2.2	(nc)
Operations and systems researchers and analysts.....	670	0.2	2
Physical scientists.....	90	<	(nc)
All other physical scientists.....	90	<	(nc)
Social scientists.....	460	0.1	1
Economists.....	460	0.1	1
Computer analysts.....	6,980	1.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	9,510	2.5	1

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Computer and office equipment (SIC 3570) -- continued:</b>			
<b>Engineers.....</b>	83,630	22	(nc)
Civil.....	80	<	15
Computer.....	27,560	7.3	2
Electrical/electronics.....	25,720	6.8	1
Industrial.....	4,460	1.2	1
Mechanical.....	2,490	0.7	4
Metallurgical/metallurgists.....	260	0.1	10
Safety.....	50	<	0
Sales.....	1,510	0.4	2
Other, n.e.c.....	21,500	5.7	(nc)
<b>Technicians.....</b>	33,050	8.7	(nc)
Computer programmer.....	14,180	3.7	(nc)
Drafter.....	900	0.2	11
Electrical/electronics engineering technician.....	10,310	2.7	3
Mechanical engineering technicians.....	1,390	0.4	3
All other engineering technicians.....	4,050	1.1	(nc)
Physical and life science technicians.....	2,220	0.6	(nc)
Chemical technicians, except health.....	380	0.1	7
All other physical and life science technicians.....	1,840	0.5	<
<b>Refrigeration and service machinery (SIC 3580)</b>			
<b>Scientific and technical personnel.....</b>	17,360	8.4	(nc)
<b>Scientists.....</b>	930	0.5	(nc)
All other mathematicians.....	100	0.1	(nc)
Physical scientists.....	40	<	(nc)
All other physical scientists.....	40	<	(nc)
Computer analysts.....	790	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,710	0.8	2
<b>Engineers.....</b>	8,320	4	(nc)
Chemical.....	160	0.1	6
Civil.....	130	0.1	0
Computer.....	220	0.1	3
Electrical/electronics.....	840	0.4	6
Industrial.....	1,650	0.8	1
Mechanical.....	2,550	1.2	3
Metallurgical/metallurgists.....	50	<	0
Sales.....	980	0.5	5
Other, n.e.c.....	1,740	0.8	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Refrigeration and service machinery (SIC 3580) -- continued:</b>			
Technicians.....	6,400	3.1	(nc)
Computer programmer.....	500	0.2	(nc)
Drafter.....	2,220	1.1	4
Electrical/electronics engineering technician.....	930	0.5	6
Mechanical engineering technicians.....	1,170	0.6	2
Civil engineering technician.....	40	<	4
All other engineering technicians.....	1,180	0.6	(nc)
Physical and life science technicians.....	360	0.2	(nc)
Chemical technicians, except health.....	140	0.1	6
All other physical and life science technicians.....	220	0.1	(nc)
<b>Industrial machinery, n.e.c. (SIC 3590)</b>			
Scientific and technical personnel.....	18,340	4.9	(nc)
Scientists.....	340	0.1	(nc)
Operations and systems researchers and analysts.....	60	<	4
Computer analysts.....	280	0.1	(nc)
Managers of scientific and technical personnel.....	1,820	0.5	3
Engineers.....	9,200	2.4	(nc)
Civil.....	40	<	24
Computer.....	350	0.1	7
Electrical/electronics.....	750	0.2	9
Industrial.....	1,390	0.4	3
Mechanical.....	3,800	1	2
Metallurgical/metallurgists.....	150	<	4
Sales.....	1,480	0.4	7
Other, n.e.c.....	1,240	0.3	(nc)
Technicians.....	6,980	1.9	(nc)
Computer programmer.....	2,320	0.6	(nc)
Drafter.....	1,820	0.5	4
Electrical/electronics engineering technician.....	810	0.2	4
Mechanical engineering technicians.....	590	0.2	3
All other engineering technicians.....	1,360	0.4	(nc)
Physical and life science technicians.....	80	<	1
Chemical technicians, except health.....	80	<	1

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electric distribution equipment (SIC 3610)</b>			
<b>Scientific and technical personnel</b> .....	10,700	13.2	(nc)
<b>Scientists</b> .....	680	0.8	(nc)
All other mathematicians.....	10	<	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Computer analysts.....	640	0.8	(nc)
<b>Managers of scientific and technical personnel</b> .....	990	1.2	2
<b>Engineers</b> .....	5,320	6.6	(nc)
Computer.....	250	0.3	9
Electrical/electronics.....	2,760	3.4	2
Industrial.....	680	0.8	2
Mechanical.....	610	0.8	4
Safety.....	60	0.1	3
Sales.....	470	0.6	4
Other, n.e.c.....	490	0.6	(nc)
<b>Technicians</b> .....	3,710	4.6	(nc)
Computer programmer.....	360	0.5	(nc)
Drafter.....	1,160	1.4	4
Electrical/electronics engineering technician.....	1,620	2	7
Mechanical engineering technicians.....	100	0.1	3
Civil engineering technician.....	80	0.1	16
All other engineering technicians.....	350	0.4	(nc)
Physical and life science technicians.....	40	0.1	5
Chemical technicians, except health.....	40	0.1	5
<b>Electrical industrial apparatus (SIC 3620)</b>			
<b>Scientific and technical personnel</b> .....	18,490	12.1	(nc)
<b>Scientists</b> .....	390	0.3	(nc)
Operations and systems researchers and analysts.....	40	<	0
Physical scientists.....	50	<	(nc)
All other physical scientists.....	50	<	(nc)
Computer analysts.....	300	0.2	2
<b>Managers of scientific and technical personnel</b> .....	1,390	0.9	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electrical industrial apparatus (SIC 3620) -- continued:</b>			
<b>Engineers.....</b>	9,890	6.5	(nc)
Chemical.....	100	0.1	5
Computer.....	460	0.3	4
Electrical/electronics.....	4,650	3.1	1
Industrial.....	930	0.6	1
Mechanical.....	1,920	1.3	2
Metallurgical/metallurgists.....	100	0.1	10
Safety.....	110	0.1	4
Sales.....	860	0.6	4
Other, n.e.c.....	760	0.5	(nc)
<b>Technicians.....</b>	6,820	4.5	(nc)
Computer programmer.....	350	0.2	(nc)
Drafter.....	1,540	1	4
Electrical/electronics engineering technician.....	3,270	2.2	3
Mechanical engineering technicians.....	460	0.3	3
Civil engineering technician.....	80	0.1	4
All other engineering technicians.....	840	0.6	(nc)
Physical and life science technicians.....	280	0.2	(nc)
Chemical technicians, except health.....	230	0.2	4
All other physical and life science technicians.....	50	<	19
<b>Household appliances (SIC 3630)</b>			
<b>Scientific and technical personnel.....</b>	5,950	5.1	(nc)
<b>Scientists.....</b>	320	0.3	(nc)
Physical scientists.....	40	<	(nc)
All other physical scientists.....	40	<	(nc)
Computer analysts.....	280	0.2	1
<b>Managers of scientific and technical personnel.....</b>	500	0.4	3
<b>Engineers.....</b>	3,320	2.9	(nc)
Computer.....	30	<	0
Electrical/electronics.....	340	0.3	4
Industrial.....	970	0.8	2
Mechanical.....	800	0.7	1
Metallurgical/metallurgists.....	60	0.1	0
Safety.....	70	0.1	0
Sales.....	40	<	4
Other, n.e.c.....	1,010	0.9	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Household appliances (SIC 3630) -- continued:</b>			
<b>Technicians.....</b>	1,810	1.6	(nc)
Computer programmer.....	270	0.2	(nc)
Drafter.....	450	0.4	3
Electrical/electronics engineering technician.....	250	0.2	1
Mechanical engineering technicians.....	260	0.2	1
All other engineering technicians.....	540	0.5	(nc)
Physical and life science technicians.....	40	<	0
Chemical technicians, except health.....	40	<	0
<b>Electric lighting and wiring equipment (SIC 3640)</b>			
<b>Scientific and technical personnel.....</b>	11,610	6.3	(nc)
<b>Scientists.....</b>	420	0.2	(nc)
Physical scientists.....	120	0.1	(nc)
Chemists.....	40	<	9
Physicists and astronomers.....	40	<	2
All other physical scientists.....	40	<	0
Computer analysts.....	300	0.2	2
<b>Managers of scientific and technical personnel.....</b>	1,040	0.6	2
<b>Engineers.....</b>	6,510	3.6	(nc)
Chemical.....	100	0.1	4
Computer.....	160	0.1	5
Electrical/electronics.....	1,180	0.6	8
Industrial.....	1,410	0.8	4
Mechanical.....	1,540	0.8	4
Metallurgical/metallurgists.....	90	0.1	8
Safety.....	100	0.1	4
Sales.....	340	0.2	7
Other, n.e.c.....	1,590	0.9	(nc)
<b>Technicians.....</b>	3,640	2	(nc)
Computer programmer.....	200	0.1	(nc)
Drafter.....	970	0.5	4
Electrical/electronics engineering technician.....	840	0.5	4
Mechanical engineering technicians.....	150	0.1	6
All other engineering technicians.....	1,390	0.8	(nc)
Physical and life science technicians.....	90	0.1	6
Chemical technicians, except health.....	90	0.1	6

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Household audio and video equipment (SIC 3650)</b>			
<b>Scientific and technical personnel</b> .....	10,410	12.7	(nc)
<b>Scientists</b> .....	370	0.5	(nc)
Computer analysts.....	370	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	740	0.9	3
<b>Engineers</b> .....	3,920	4.8	(nc)
Computer.....	390	0.5	4
Electrical/electronics.....	1,670	2	8
Industrial.....	430	0.5	6
Mechanical.....	630	0.8	4
Safety.....	40	0.1	2
Sales.....	120	0.2	16
Other, n.e.c.....	640	0.8	(nc)
<b>Technicians</b> .....	5,380	6.6	(nc)
Computer programmer.....	440	0.5	2
Drafter.....	250	0.3	6
Electrical/electronics engineering technician.....	3,170	3.9	3
All other engineering technicians.....	1,520	1.9	(nc)
<b>Communication equipment (SIC 3660)</b>			
<b>Scientific and technical personnel</b> .....	77,310	27.9	(nc)
<b>Scientists</b> .....	7,880	2.9	(nc)
Operations and systems researchers and analysts.....	740	0.3	<
All other mathematicians.....	40	<	(nc)
Physical scientists.....	160	0.1	(nc)
All other physical scientists.....	160	0.1	(nc)
Social scientists.....	490	0.2	<
Economists.....	490	0.2	<
Computer analysts.....	6,450	2.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	4,690	1.7	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Communication equipment (SIC 3660) -- continued:</b>			
<b>Engineers.....</b>	45,850	16.5	(nc)
Computer.....	9,720	3.5	2
Electrical/electronics.....	18,120	6.6	2
Industrial.....	2,820	1	<
Mechanical.....	1,610	0.6	2
Metallurgical/metallurgists.....	40	<	5
Safety.....	110	<	3
Sales.....	870	0.3	10
Other, n.e.c.....	12,560	4.5	(nc)
<b>Technicians.....</b>	18,890	6.8	(nc)
Computer programmer.....	80	<	2
Drafter.....	1,990	0.7	2
Electrical/electronics engineering technician.....	10,780	3.9	2
Mechanical engineering technicians.....	1,150	0.4	1
Civil engineering technician.....	50	<	5
All other engineering technicians.....	4,700	1.7	(nc)
Physical and life science technicians.....	140	0.1	(nc)
All other physical and life science technicians.....	140	0.1	(nc)
<b>Electronic components and accessories (SIC 3670)</b>			
<b>Scientific and technical personnel.....</b>	144,080	22.4	(nc)
<b>Scientists.....</b>	7,250	1.1	(nc)
Operations and systems researchers and analysts.....	480	0.1	1
All other mathematicians.....	90	<	(nc)
Physical scientists.....	500	0.1	(nc)
Chemists.....	240	<	6
Physicists and astronomers.....	60	<	17
All other physical scientists.....	200	<	21
Life scientists.....	40	<	(nc)
All other life scientists.....	40	<	(nc)
Social scientists.....	660	0.1	1
Economists.....	660	0.1	1
Computer analysts.....	5,480	0.9	(nc)
<b>Managers of scientific and technical personnel.....</b>	11,050	1.7	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electronic components and accessories (SIC 3670) -- continued:</b>			
<b>Engineers.....</b>	80,010	12.4	(nc)
Chemical.....	1,480	0.2	5
Computer.....	9,070	1.4	4
Electrical/electronics.....	34,820	5.4	2
Industrial.....	5,350	0.8	1
Mechanical.....	6,660	1	2
Metallurgical/metallurgists.....	1,480	0.2	2
Safety.....	820	0.1	3
Sales.....	2,610	0.4	3
Other, n.e.c.....	17,720	2.8	(nc)
<b>Technicians.....</b>	45,770	7.1	(nc)
Computer programmer.....	6,190	1	(nc)
Drafter.....	3,180	0.5	2
Electrical/electronics engineering technician.....	21,700	3.4	2
Mechanical engineering technicians.....	2,270	0.4	2
Civil engineering technician.....	170	<	8
All other engineering technicians.....	8,600	1.3	(nc)
Physical and life science technicians.....	3,660	0.6	(nc)
Chemical technicians, except health.....	1,030	0.2	7
All other physical and life science technicians.....	2,630	0.4	<
<b>Misc. electrical equipment &amp; supplies (SIC 3690)</b>			
<b>Scientific and technical personnel.....</b>	15,770	10.9	(nc)
<b>Scientists.....</b>	800	0.6	(nc)
Physical scientists.....	240	0.2	(nc)
Chemists.....	120	0.1	3
All other physical scientists.....	120	0.1	(nc)
Computer analysts.....	560	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,320	0.9	2
<b>Engineers.....</b>	8,740	6.1	(nc)
Chemical.....	180	0.1	3
Computer.....	1,900	1.3	22
Electrical/electronics.....	1,500	1	3
Industrial.....	1,380	1	1
Mechanical.....	1,230	0.9	2
Metallurgical/metallurgists.....	60	<	21
Safety.....	80	0.1	2
Sales.....	300	0.2	8
Other, n.e.c.....	2,110	1.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. electrical equipment &amp; supplies (SIC 3690) -- continued:</b>			
Technicians.....	4,910	3.4	(nc)
Computer programmer.....	250	0.2	(nc)
Drafter.....	620	0.4	3
Electrical/electronics engineering technician.....	1,620	1.1	3
Mechanical engineering technicians.....	370	0.3	4
All other engineering technicians.....	1,830	1.3	(nc)
Physical and life science technicians.....	220	0.2	1
Chemical technicians, except health.....	220	0.2	1
<b>Motor vehicles and equipment (SIC 3710)</b>			
Scientific and technical personnel.....	94,710	9.3	(nc)
Scientists.....	5,830	0.6	(nc)
Operations and systems researchers and analysts.....	420	<	6
Statisticians.....	670	0.1	1
All other mathematicians.....	890	0.1	(nc)
Physical scientists.....	510	0.1	(nc)
All other physical scientists.....	510	0.1	(nc)
Social scientists.....	50	<	15
Economists.....	50	<	15
Computer analysts.....	3,290	0.3	(nc)
Managers of scientific and technical personnel.....	5,330	0.5	5
Engineers.....	62,420	6.1	(nc)
Chemical.....	200	<	7
Civil.....	200	<	2
Computer.....	360	<	1
Electrical/electronics.....	1,490	0.2	12
Industrial.....	10,800	1.1	1
Mechanical.....	9,420	0.9	15
Metallurgical/metallurgists.....	600	0.1	5
Safety.....	490	0.1	5
Sales.....	710	0.1	6
Other, n.e.c.....	38,150	3.7	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Motor vehicles and equipment (SIC 3710) -- continued:</b>			
<b>Technicians.....</b>	21,130	2.1	(nc)
Computer programmer.....	1,420	0.1	(nc)
Drafter.....	4,050	0.4	1
Electrical/electronics engineering technician.....	990	0.1	7
Mechanical engineering technicians.....	1,900	0.2	4
Civil engineering technician.....	90	<	5
All other engineering technicians.....	12,360	1.2	(nc)
Physical and life science technicians.....	320	<	(nc)
All other physical and life science technicians.....	320	<	(nc)
<b>Aircraft and parts (SIC 3720)</b>			
<b>Scientific and technical personnel.....</b>	119,100	22.6	(nc)
<b>Scientists.....</b>	14,170	2.7	(nc)
Operations and systems researchers and analysts.....	1,310	0.3	1
All other mathematicians.....	590	0.1	(nc)
Life scientists.....	60	<	(nc)
All other life scientists.....	60	<	(nc)
Social scientists.....	80	<	(nc)
Economists.....	50	<	0
All other social scientists.....	30	<	0
Computer analysts.....	12,130	2.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	7,590	1.4	2
<b>Engineers.....</b>	68,200	12.9	(nc)
Aeronautical.....	17,730	3.4	1
Chemical.....	320	0.1	1
Computer.....	1,270	0.2	1
Industrial.....	9,100	1.7	16
Marine.....	40	<	0
Mechanical.....	11,600	2.2	2
Metallurgical/metallurgists.....	1,530	0.3	2
Safety.....	510	0.1	2
Sales.....	430	0.1	3
Other, n.e.c.....	25,670	4.9	(nc)
<b>Technicians.....</b>	29,140	5.5	(nc)
Mechanical engineering technicians.....	8,240	1.6	1
Civil engineering technician.....	280	0.1	4
All other engineering technicians.....	20,220	3.8	(nc)
Physical and life science technicians.....	400	0.1	(nc)
All other physical and life science technicians.....	400	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Ship and boat building and repairing (SIC 3730)</b>			
<b>Scientific and technical personnel</b>	8,950	5.3	(nc)
<b>Scientists</b>	380	0.2	(nc)
Statisticians	50	<	0
Physical scientists	40	<	(nc)
All other physical scientists	40	<	(nc)
Computer analysts	290	0.2	(nc)
<b>Managers of scientific and technical personnel</b>	800	0.5	2
<b>Engineers</b>	4,210	2.5	(nc)
Civil	30	<	5
Computer	30	<	3
Electrical/electronics	350	0.2	<
Industrial	390	0.2	2
Marine	480	0.3	6
Mechanical	440	0.3	24
Safety	280	0.2	3
Sales	40	<	35
Other, n.e.c.	2,170	1.3	(nc)
<b>Technicians</b>	3,560	2.1	(nc)
Computer programmer	160	0.1	(nc)
Drafter	2,210	1.3	1
Electrical/electronics engineering technician	120	0.1	5
Mechanical engineering technicians	190	0.1	13
Civil engineering technician	60	<	0
All other engineering technicians	770	0.5	(nc)
Physical and life science technicians	50	<	(nc)
All other physical and life science technicians	50	<	(nc)
<b>Railroad equipment (SIC 3740)</b>			
<b>Scientific and technical personnel</b>	1,740	4.5	(nc)
<b>Scientists</b>	110	0.3	(nc)
Computer analysts	110	0.3	(nc)
<b>Managers of scientific and technical personnel</b>	180	0.5	1

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Railroad equipment (SIC 3740) -- continued:</b>			
<b>Engineers.....</b>	1,020	2.6	(nc)
Electrical/electronics.....	70	0.2	2
Mechanical.....	370	1	2
Metallurgical/metallurgists.....	50	0.1	0
Sales.....	70	0.2	8
Other, n.e.c.....	460	1.2	(nc)
<b>Technicians.....</b>	430	1.1	(nc)
Drafter.....	150	0.4	2
Electrical/electronics engineering technician.....	40	0.1	3
Mechanical engineering technicians.....	90	0.2	4
All other engineering technicians.....	150	0.4	(nc)
<b>Motorcycles, bicycles, and parts (SIC 3750)</b>			
<b>Scientific and technical personnel.....</b>	1,460	7.2	(nc)
<b>Scientists.....</b>	80	0.4	(nc)
Computer analysts.....	80	0.4	(nc)
<b>Managers of scientific and technical personnel.....</b>	340	1.7	2
<b>Engineers.....</b>	810	4	(nc)
Computer.....	50	0.3	0
Electrical/electronics.....	40	0.2	0
Industrial.....	50	0.3	0
Mechanical.....	510	2.5	8
Other, n.e.c.....	160	0.8	(nc)
<b>Technicians.....</b>	230	1.2	(nc)
Drafter.....	60	0.3	3
Mechanical engineering technicians.....	90	0.5	0
All other engineering technicians.....	80	0.4	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Guided missiles, space vehicles, parts (SIC 3760)</b>			
<b>Scientific and technical personnel</b> .....	41,920	46.9	(nc)
<b>Scientists</b> .....	2,500	2.8	(nc)
Statisticians.....	30	<	15
All other mathematicians.....	120	0.1	7
Physical scientists.....	330	0.4	(nc)
All other physical scientists.....	330	0.4	(nc)
Social scientists.....	150	0.2	(nc)
All other social scientists.....	150	0.2	(nc)
Computer analysts.....	1,870	2.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	2,630	3	1
<b>Engineers</b> .....	30,980	34.7	(nc)
Aeronautical.....	13,620	15.2	2
Chemical.....	90	0.1	0
Computer.....	5,010	5.6	1
Electrical/electronics.....	3,450	3.9	<
Industrial.....	2,250	2.5	<
Mechanical.....	1,930	2.2	2
Safety.....	190	0.2	0
Other, n.e.c.....	4,440	5	(nc)
<b>Technicians</b> .....	5,810	6.5	(nc)
Computer programmer.....	1,070	1.2	(nc)
Drafter.....	420	0.5	1
Electrical/electronics engineering technician.....	2,040	2.3	0
Mechanical engineering technicians.....	990	1.1	0
Civil engineering technician.....	100	0.1	0
All other engineering technicians.....	940	1.1	(nc)
Physical and life science technicians.....	250	0.3	(nc)
All other physical and life science technicians.....	250	0.3	(nc)
<b>Miscellaneous transportation equipment (SIC 3790)</b>			
<b>Scientific and technical personnel</b> .....	3,000	5.5	(nc)
<b>Scientists</b> .....	80	0.2	5
Computer analysts.....	80	0.2	5
<b>Managers of scientific and technical personnel</b> .....	660	1.2	22

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous transportation equipment (SIC 3790) -- continued:</b>			
<b>Engineers.....</b>	1,240	2.3	(nc)
Electrical/electronics.....	130	0.2	20
Industrial.....	180	0.3	7
Mechanical.....	530	1	11
Safety.....	30	0.1	4
Other, n.e.c.....	370	0.7	(nc)
<b>Technicians.....</b>	1,020	1.9	(nc)
Computer programmer.....	50	0.1	12
Drafter.....	290	0.5	5
Electrical/electronics engineering technician.....	60	0.1	13
Mechanical engineering technicians.....	350	0.6	14
All other engineering technicians.....	270	0.5	(nc)
<b>Search and navigation equipment (SIC 3810)</b>			
<b>Scientific and technical personnel.....</b>	71,870	44.5	(nc)
<b>Scientists.....</b>	2,430	1.5	(nc)
Operations and systems researchers and analysts.....	340	0.2	1
Physical scientists.....	130	0.1	(nc)
All other physical scientists.....	130	0.1	(nc)
Life scientists.....	80	0.1	(nc)
All other life scientists.....	80	0.1	(nc)
Social scientists.....	30	<	(nc)
All other social scientists.....	30	<	(nc)
Computer analysts.....	1,850	1.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	4,740	2.9	2
<b>Engineers.....</b>	45,420	28.1	(nc)
Aeronautical.....	640	0.4	<
Computer.....	8,180	5.1	1
Electrical/electronics.....	18,180	11.2	1
Industrial.....	3,150	2	2
Mechanical.....	3,440	2.1	2
Sales.....	180	0.1	14
Other, n.e.c.....	11,650	7.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Search and navigation equipment (SIC 3810) -- continued:</b>			
<b>Technicians.....</b>	19,280	11.9	(nc)
Computer programmer.....	2,340	1.5	(nc)
Drafter.....	1,530	1	4
Electrical/electronics engineering technician.....	10,320	6.4	1
Mechanical engineering technicians.....	1,910	1.2	1
All other engineering technicians.....	2,950	1.8	(nc)
Physical and life science technicians.....	230	0.1	(nc)
Chemical technicians, except health.....	110	0.1	1
All other physical and life science technicians.....	120	0.1	15
<b>Measuring and controlling devices (SIC 3820)</b>			
<b>Scientific and technical personnel.....</b>	70,310	23.4	(nc)
<b>Scientists.....</b>	3,990	1.3	(nc)
Operations and systems researchers and analysts.....	260	0.1	3
Physical scientists.....	1,260	0.4	(nc)
Chemists.....	820	0.3	5
All other physical scientists.....	440	0.2	(nc)
Life scientists.....	320	0.1	(nc)
All other life scientists.....	320	0.1	(nc)
Computer analysts.....	2,150	0.7	(nc)
<b>Managers of scientific and technical personnel.....</b>	5,340	1.8	1
<b>Engineers.....</b>	36,700	12.2	(nc)
Chemical.....	500	0.2	2
Computer.....	7,420	2.5	1
Electrical/electronics.....	11,050	3.7	2
Industrial.....	2,920	1	1
Mechanical.....	5,470	1.8	2
Sales.....	3,340	1.1	3
Other, n.e.c.....	6,000	2	(nc)
<b>Technicians.....</b>	24,280	8.1	(nc)
Computer programmer.....	2,540	0.8	(nc)
Drafter.....	2,960	1	3
Electrical/electronics engineering technician.....	11,890	4	2
Mechanical engineering technicians.....	2,030	0.7	3
All other engineering technicians.....	4,100	1.4	(nc)
Physical and life science technicians.....	760	0.3	(nc)
Chemical technicians, except health.....	530	0.2	7
All other physical and life science technicians.....	230	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Medical instruments and supplies (SIC 3840)</b>			
Scientific and technical personnel.....	38,290	13.6	(nc)
<b>Scientists.....</b>	4,970	1.8	(nc)
Operations and systems researchers and analysts.....	280	0.1	3
Physical scientists.....	1,540	0.6	(nc)
Chemists.....	1,320	0.5	6
All other physical scientists.....	220	0.1	(nc)
Life scientists.....	1,450	0.5	(nc)
All other life scientists.....	1,450	0.5	(nc)
Social scientists.....	60	<	(nc)
All other social scientists.....	60	<	(nc)
Computer analysts.....	1,640	0.6	(nc)
<b>Managers of scientific and technical personnel.....</b>	2,990	1.1	3
<b>Engineers.....</b>	17,330	6.2	(nc)
Chemical.....	260	0.1	16
Computer.....	1,870	0.7	5
Electrical/electronics.....	3,290	1.2	3
Industrial.....	2,160	0.8	3
Mechanical.....	4,120	1.5	2
Other, n.e.c.....	5,630	2	(nc)
<b>Technicians.....</b>	13,000	4.6	(nc)
Computer programmer.....	930	0.3	(nc)
Drafter.....	1,400	0.5	4
Electrical/electronics engineering technician.....	3,340	1.2	5
Mechanical engineering technicians.....	1,890	0.7	4
All other engineering technicians.....	3,370	1.2	(nc)
Physical and life science technicians.....	2,070	0.7	(nc)
Chemical technicians, except health.....	1,330	0.5	3
All other physical and life science technicians.....	740	0.3	(nc)
<b>Ophthalmic goods (SIC 3850)</b>			
Scientific and technical personnel.....	1,260	3.6	(nc)
<b>Scientists.....</b>	130	0.4	(nc)
Physical scientists.....	40	0.1	(nc)
All other physical scientists.....	40	0.1	(nc)
Computer analysts.....	90	0.3	2
<b>Managers of scientific and technical personnel.....</b>	110	0.3	4

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Ophthalmic goods (SIC 3850) -- continued:</b>			
<b>Engineers.....</b>	440	1.3	(nc)
Industrial.....	100	0.3	4
Mechanical.....	130	0.4	19
Other, n.e.c.....	210	0.6	(nc)
<b>Technicians.....</b>	580	1.7	(nc)
Computer programmer.....	90	0.3	5
Electrical/electronics engineering technician.....	60	0.2	3
Mechanical engineering technicians.....	100	0.3	15
All other engineering technicians.....	270	0.8	(nc)
Physical and life science technicians.....	60	0.2	3
Chemical technicians, except health.....	60	0.2	3
<b>Photographic equipment and supplies (SIC 3860)</b>			
<b>Scientific and technical personnel.....</b>	15,920	20.3	(nc)
<b>Scientists.....</b>	3,470	4.4	(nc)
Physical scientists.....	2,680	3.4	(nc)
All other physical scientists.....	2,680	3.4	(nc)
Social scientists.....	120	0.2	(nc)
All other social scientists.....	120	0.2	(nc)
Computer analysts.....	670	0.9	(nc)
<b>Managers of scientific and technical personnel.....</b>	900	1.2	4
<b>Engineers.....</b>	7,920	10.1	(nc)
Computer.....	280	0.4	2
Electrical/electronics.....	680	0.9	3
Industrial.....	530	0.7	<
Mechanical.....	930	1.2	3
Sales.....	50	0.1	7
Other, n.e.c.....	5,450	7	(nc)
<b>Technicians.....</b>	3,630	4.6	(nc)
Drafter.....	170	0.2	9
Electrical/electronics engineering technician.....	760	1	9
Mechanical engineering technicians.....	550	0.7	1
All other engineering technicians.....	1,670	2.1	(nc)
Physical and life science technicians.....	480	0.6	1
Chemical technicians, except health.....	480	0.6	1

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Watches, clocks, watchcases &amp; parts (SIC 3870)</b>			
<b>Scientific and technical personnel</b>	360	5.4	(nc)
<b>Scientists</b>	60	0.9	(nc)
Computer analysts	60	0.9	(nc)
<b>Engineers</b>	190	2.9	(nc)
Industrial	40	0.6	0
Other, n.e.c.	150	2.3	(nc)
<b>Technicians</b>	110	1.7	(nc)
Electrical/electronics engineering technician	50	0.8	0
All other engineering technicians	60	0.9	(nc)
<b>Jewelry, silverware, and plated ware (SIC 3910)</b>			
<b>Scientific and technical personnel</b>	390	0.8	(nc)
<b>Scientists</b>	100	0.2	2
Computer analysts	100	0.2	2
<b>Managers of scientific and technical personnel</b>	40	0.1	2
<b>Engineers</b>	100	0.2	(nc)
Industrial	60	0.1	3
Other, n.e.c.	40	0.1	(nc)
<b>Technicians</b>	150	0.3	3
Computer programmer	150	0.3	3
<b>Musical instruments (SIC 3930)</b>			
<b>Scientific and technical personnel</b>	460	2.8	(nc)
<b>Scientists</b>	70	0.4	(nc)
Computer analysts	70	0.4	(nc)
<b>Managers of scientific and technical personnel</b>	50	0.3	2
<b>Engineers</b>	130	0.8	(nc)
Other, n.e.c.	130	0.8	(nc)
<b>Technicians</b>	210	1.3	(nc)
Drafter	90	0.6	5
Mechanical engineering technicians	30	0.2	3
All other engineering technicians	90	0.6	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Toys and sporting goods (SIC 3940)</b>			
<b>Scientific and technical personnel</b> .....	2,940	2.9	(nc)
<b>Scientists</b> .....	270	0.3	(nc)
Physical scientists.....	40	<	(nc)
All other physical scientists.....	40	<	(nc)
Computer analysts.....	230	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	540	0.5	2
<b>Engineers</b> .....	1,070	1	(nc)
Industrial.....	370	0.4	2
Mechanical.....	340	0.3	5
Other, n.e.c.....	360	0.4	(nc)
<b>Technicians</b> .....	1,060	1	(nc)
Computer programmer.....	150	0.2	3
Drafter.....	240	0.2	7
Mechanical engineering technicians.....	250	0.2	6
All other engineering technicians.....	360	0.4	(nc)
Physical and life science technicians.....	60	0.1	(nc)
All other physical and life science technicians.....	60	0.1	(nc)
<b>Pens, pencils, office, &amp; art supplies (SIC 3950)</b>			
<b>Scientific and technical personnel</b> .....	810	2.7	(nc)
<b>Scientists</b> .....	50	0.2	2
Computer analysts.....	50	0.2	2
<b>Managers of scientific and technical personnel</b> .....	80	0.3	6
<b>Engineers</b> .....	240	0.8	(nc)
Industrial.....	60	0.2	5
Mechanical.....	140	0.5	6
Other, n.e.c.....	40	0.1	(nc)
<b>Technicians</b> .....	440	1.5	(nc)
Computer programmer.....	50	0.2	0
Drafter.....	150	0.5	23
Mechanical engineering technicians.....	50	0.2	0
All other engineering technicians.....	190	0.6	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Costume jewelry and notions (SIC 3960)</b>			
<b>Scientific and technical personnel</b> .....	230	1.1	(nc)
<b>Scientists</b> .....	90	0.4	(nc)
Computer analysts.....	90	0.4	(nc)
<b>Engineers</b> .....	100	0.5	(nc)
Industrial.....	70	0.3	3
Mechanical.....	30	0.2	10
<b>Technicians</b> .....	40	0.2	(nc)
All other engineering technicians.....	40	0.2	(nc)
<b>Miscellaneous manufactures (SIC 3990)</b>			
<b>Scientific and technical personnel</b> .....	4,210	2.4	(nc)
<b>Scientists</b> .....	330	0.2	(nc)
Physical scientists.....	60	<	(nc)
All other physical scientists.....	60	<	(nc)
Computer analysts.....	270	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	340	0.2	3
<b>Engineers</b> .....	1,490	0.9	(nc)
Industrial.....	200	0.1	4
Mechanical.....	430	0.3	3
Other, n.e.c.....	860	0.5	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous manufactures (SIC 3990) -- continued:</b>			
Technicians.....	2,050	1.2	(nc)
Computer programmer.....	250	0.1	3
Drafter.....	1,110	0.6	8
Mechanical engineering technicians.....	200	0.1	11
All other engineering technicians.....	440	0.3	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.4. Employed scientists, engineers, technicians (SETs), and SET managers,  
in SICs 40-59 (selected trade and regulated industries),  
and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Railroads (SIC 4010)</b>			
<b>Scientific and technical personnel</b> .....	6,690	2.7	(nc)
<b>Scientists</b> .....	930	0.4	(nc)
Operations and systems researchers and analysts.....	420	0.2	31
Computer analysts.....	510	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,000	0.4	21
<b>Engineers</b> .....	1,660	0.7	(nc)
Civil.....	760	0.3	26
Electrical/electronics.....	400	0.2	41
Other, n.e.c.....	500	0.2	(nc)
<b>Technicians</b> .....	3,100	1.2	(nc)
Computer programmer.....	790	0.3	27
Drafter.....	40	<	42
Electrical/electronics engineering technician.....	320	0.1	23
Mechanical engineering technicians.....	40	<	4
Civil engineering technician.....	180	0.1	11
All other engineering technicians.....	1,730	0.7	(nc)
<b>Local and suburban transportation (SIC 4110)</b>			
<b>Scientific and technical personnel</b> .....	250	0.1	(nc)
<b>Scientists</b> .....	120	0.1	20
Computer analysts.....	120	0.1	20
<b>Managers of scientific and technical personnel</b> .....	40	<	20
<b>Technicians</b> .....	90	<	(nc)
Computer programmer.....	50	<	16
All other engineering technicians.....	40	<	(nc)
<b>Intercity and rural bus transportation (SIC 4130)</b>			
<b>Scientific and technical personnel</b> .....	160	0.7	(nc)
<b>Scientists</b> .....	160	0.7	(nc)
Computer analysts.....	160	0.7	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Trucking and courier services, excluding air (SIC 4210)</b>			
<b>Scientific and technical personnel</b> .....	4,810	0.3	(nc)
<b>Scientists</b> .....	1,880	0.1	(nc)
Social scientists.....	90	<	(nc)
All other social scientists.....	90	<	(nc)
Computer analysts.....	1,790	0.1	4
<b>Managers of scientific and technical personnel</b> .....	870	0.1	5
<b>Engineers</b> .....	490	<	(nc)
Other, n.e.c.....	490	<	(nc)
<b>Technicians</b> .....	1,570	0.1	(nc)
Computer programmer.....	1,390	0.1	4
All other engineering technicians.....	180	<	(nc)
<b>Public warehousing and storage (SIC 4220)</b>			
<b>Scientific and technical personnel</b> .....	1,030	0.6	(nc)
<b>Scientists</b> .....	170	0.1	6
Computer analysts.....	170	0.1	6
<b>Managers of scientific and technical personnel</b> .....	180	0.1	13
<b>Engineers</b> .....	300	0.2	(nc)
Other, n.e.c.....	300	0.2	(nc)
<b>Technicians</b> .....	380	0.2	(nc)
Computer programmer.....	260	0.2	4
All other engineering technicians.....	120	0.1	(nc)
<b>Deep sea foreign transportation of freight (SIC 4410)</b>			
<b>Scientific and technical personnel</b> .....	590	4.4	(nc)
<b>Scientists</b> .....	290	2.2	(nc)
Physical scientists.....	110	0.8	(nc)
All other physical scientists.....	110	0.8	(nc)
Computer analysts.....	180	1.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	80	0.6	4

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Deep sea foreign transportation of freight (SIC 4410) -- continued:</b>			
Engineers.....	160	1.2	(nc)
Marine.....	100	0.8	3
Other, n.e.c.....	60	0.5	(nc)
Technicians.....	60	0.5	(nc)
All other engineering technicians.....	60	0.5	(nc)
<b>Deep sea domestic transportation of freight (SIC 4420)</b>			
Scientific and technical personnel.....	260	3	(nc)
Scientists.....	70	0.8	(nc)
Computer analysts.....	70	0.8	(nc)
Engineers.....	120	1.4	(nc)
Other, n.e.c.....	120	1.4	(nc)
Technicians.....	70	0.8	8
Computer programmer.....	70	0.8	8
<b>Freight transportation on the Great Lakes (SIC 4430)</b>			
Scientific and technical personnel.....	70	3.6	(nc)
Engineers.....	70	3.6	(nc)
Other, n.e.c.....	70	3.6	(nc)
<b>Water transportation of freight, n.e.c. (SIC 4440)</b>			
Scientific and technical personnel.....	510	3.1	(nc)
Engineers.....	510	3.1	(nc)
Mechanical.....	60	0.4	0
Other, n.e.c.....	450	2.7	(nc)
<b>Water transportation of passengers (SIC 4480)</b>			
Scientific and technical personnel.....	250	1.3	(nc)
Scientists.....	50	0.3	(nc)
Computer analysts.....	50	0.3	(nc)
Managers of scientific and technical personnel.....	40	0.2	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Water transportation of passengers (SIC 4480) -- continued:</b>			
Engineers.....	120	0.6	(nc)
Marine.....	80	0.4	12
Other, n.e.c.....	40	0.2	(nc)
Technicians.....	40	0.2	40
Computer programmer.....	40	0.2	40
<b>Water transportation services (SIC 4490)</b>			
Scientific and technical personnel.....	2,110	1.7	(nc)
Scientists.....	110	0.1	0
Computer analysts.....	110	0.1	0
Managers of scientific and technical personnel.....	300	0.3	7
Engineers.....	1,340	1.1	(nc)
Marine.....	740	0.6	13
Mechanical.....	70	0.1	36
Other, n.e.c.....	530	0.4	(nc)
Technicians.....	360	0.3	(nc)
Computer programmer.....	300	0.3	20
All other engineering technicians.....	60	0.1	(nc)
<b>Air transportation, scheduled (SIC 4510)</b>			
Scientific and technical personnel.....	15,710	1.5	(nc)
Scientists.....	5,450	0.5	(nc)
Operations and systems researchers and analysts.....	1,480	0.1	44
Physical scientists.....	100	<	(nc)
All other physical scientists.....	100	<	(nc)
Social scientists.....	310	<	(nc)
Economists.....	150	<	13
All other social scientists.....	160	<	(nc)
Computer analysts.....	3,560	0.3	(nc)
Managers of scientific and technical personnel.....	1,650	0.2	30

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Air transportation, scheduled (SIC 4510) -- continued:</b>			
<b>Engineers.....</b>	4,580	0.4	(nc)
Aeronautical.....	720	0.1	24
Computer.....	700	0.1	7
Electrical/electronics.....	170	<	34
Industrial.....	1,150	0.1	15
Other, n.e.c.....	1,840	0.2	(nc)
<b>Technicians.....</b>	4,030	0.4	(nc)
Computer programmer.....	2,570	0.2	27
Electrical/electronics engineering technician.....	460	<	3
All other engineering technicians.....	1,000	0.1	(nc)
<b>Air transportation, nonscheduled (SIC 4520)</b>			
<b>Scientific and technical personnel.....</b>	370	0.8	(nc)
<b>Scientists.....</b>	60	0.1	2
Computer analysts.....	60	0.1	2
<b>Managers of scientific and technical personnel.....</b>	50	0.1	7
<b>Engineers.....</b>	140	0.3	13
Aeronautical.....	140	0.3	13
<b>Technicians.....</b>	120	0.2	(nc)
Computer programmer.....	40	0.1	0
Electrical/electronics engineering technician.....	30	0.1	3
All other engineering technicians.....	50	0.1	(nc)
<b>Airports, flying fields, and services (SIC 4580)</b>			
<b>Scientific and technical personnel.....</b>	1,260	1	(nc)
<b>Scientists.....</b>	180	0.1	(nc)
Operations and systems researchers and analysts.....	30	<	0
Computer analysts.....	150	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	130	0.1	3
<b>Engineers.....</b>	470	0.4	(nc)
Aeronautical.....	220	0.2	2
Electrical/electronics.....	80	0.1	7
Industrial.....	50	<	11
Other, n.e.c.....	120	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Airports, flying fields, and services (SIC 4580) -- continued:</b>			
<b>Technicians.....</b>	480	0.4	(nc)
Computer programmer.....	50	<	24
Electrical/electronics engineering technician.....	320	0.3	9
All other engineering technicians.....	110	0.1	(nc)
<b>Passenger transportation arrangements (SIC 4720)</b>			
<b>Scientific and technical personnel.....</b>	920	0.4	(nc)
<b>Scientists.....</b>	270	0.1	5
Computer analysts.....	270	0.1	5
<b>Managers of scientific and technical personnel.....</b>	100	0.1	14
<b>Engineers.....</b>	30	<	(nc)
Other, n.e.c.....	30	<	(nc)
<b>Technicians.....</b>	520	0.2	1
Computer programmer.....	520	0.2	1
<b>Freight transportation arrangements (SIC 4730)</b>			
<b>Scientific and technical personnel.....</b>	1,750	1	(nc)
<b>Scientists.....</b>	550	0.3	5
Computer analysts.....	550	0.3	5
<b>Managers of scientific and technical personnel.....</b>	180	0.1	15
<b>Engineers.....</b>	130	0.1	(nc)
Other, n.e.c.....	130	0.1	(nc)
<b>Technicians.....</b>	890	0.5	(nc)
Computer programmer.....	800	0.4	6
All other engineering technicians.....	90	0.1	(nc)
<b>Rental of railroad cars (SIC 4740)</b>			
<b>Scientific and technical personnel.....</b>	110	5	(nc)
<b>Scientists.....</b>	30	1.4	(nc)
Computer analysts.....	30	1.4	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Rental of railroad cars (SIC 4740) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	40	1.8	25
<b>Engineers</b> .....	40	1.8	(nc)
Other, n.e.c. ....	40	1.8	(nc)
<b>Misc. transportation services (SIC 4780)</b>			
<b>Scientific and technical personnel</b> .....	290	0.6	(nc)
<b>Scientists</b> .....	90	0.2	(nc)
Physical scientists.....	30	0.1	(nc)
All other physical scientists.....	30	0.1	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Engineers</b> .....	40	0.1	(nc)
Other, n.e.c. ....	40	0.1	(nc)
<b>Technicians</b> .....	160	0.3	(nc)
All other engineering technicians.....	40	0.1	(nc)
Physical and life science technicians.....	120	0.2	(nc)
All other physical and life science technicians.....	120	0.2	(nc)
<b>Telephone communications (SIC 4810)</b>			
<b>Scientific and technical personnel</b> .....	109,630	10.6	(nc)
<b>Scientists</b> .....	20,560	2	(nc)
Operations and systems researchers and analysts.....	1,090	0.1	14
Social scientists.....	1,520	0.1	(nc)
Economists.....	1,170	0.1	2
All other social scientists.....	350	<	(nc)
Computer analysts.....	17,950	1.8	(nc)
<b>Managers of scientific and technical personnel</b> .....	8,790	0.9	4
<b>Engineers</b> .....	40,060	3.9	(nc)
Civil.....	460	<	6
Computer.....	9,600	0.9	2
Electrical/electronics.....	15,330	1.5	3
Industrial.....	380	<	22
Mechanical.....	110	<	23
Sales.....	390	<	3
Other, n.e.c. ....	13,790	1.3	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Telephone communications (SIC 4810) -- continued:</b>			
<b>Technicians.....</b>	40,220	3.9	(nc)
Computer programmer.....	17,120	1.7	2
Drafter.....	2,440	0.2	5
Electrical/electronics engineering technician.....	12,520	1.2	4
Mechanical engineering technicians.....	350	<	10
Civil engineering technician.....	350	<	10
All other engineering technicians.....	7,440	0.7	(nc)
<b>Telegraph and other communications (SIC 4820)</b>			
<b>Scientific and technical personnel.....</b>	1,630	16.5	(nc)
<b>Scientists.....</b>	690	7	6
Computer analysts.....	690	7	6
<b>Managers of scientific and technical personnel.....</b>	60	0.6	14
<b>Engineers.....</b>	270	2.8	13
Computer.....	270	2.8	13
<b>Technicians.....</b>	610	6.2	(nc)
Computer programmer.....	450	4.6	6
Electrical/electronics engineering technician.....	80	0.8	11
All other engineering technicians.....	80	0.8	0
<b>Radio and television broadcasting (SIC 4830)</b>			
<b>Scientific and technical personnel.....</b>	31,650	12.8	(nc)
<b>Scientists.....</b>	360	0.2	(nc)
Physical scientists.....	200	0.1	(nc)
Atmospheric and space scientists.....	160	0.1	28
All other physical scientists.....	40	<	25
Computer analysts.....	160	0.1	2
<b>Managers of scientific and technical personnel.....</b>	1,460	0.6	4
<b>Engineers.....</b>	3,520	1.4	(nc)
Computer.....	370	0.2	14
Electrical/electronics.....	2,160	0.9	4
Industrial.....	110	<	4
Mechanical.....	160	0.1	18
Other, n.e.c.....	720	0.3	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Radio and television broadcasting (SIC 4830) -- continued:</b>			
<b>Technicians</b>	26,310	10.7	(nc)
Computer programmer	280	0.1	33
Drafter	40	<	0
Electrical/electronics engineering technician	1,900	0.8	5
Mechanical engineering technicians	100	<	13
All other engineering technicians	23,990	9.8	(nc)
<b>Cable and other pay TV services (SIC 4840)</b>			
<b>Scientific and technical personnel</b>	11,490	6	(nc)
<b>Scientists</b>	630	0.3	(nc)
All other mathematicians	10	<	(nc)
Social scientists	90	0.1	(nc)
All other social scientists	90	0.1	(nc)
Computer analysts	530	0.3	(nc)
<b>Managers of scientific and technical personnel</b>	910	0.5	5
<b>Engineers</b>	1,960	1	(nc)
Computer	490	0.3	5
Electrical/electronics	870	0.5	3
Mechanical	100	0.1	10
Other, n.e.c.	500	0.3	(nc)
<b>Technicians</b>	7,990	4.2	(nc)
Computer programmer	300	0.2	8
Drafter	560	0.3	4
Electrical/electronics engineering technician	2,290	1.2	8
Mechanical engineering technicians	70	<	20
Civil engineering technician	50	<	10
All other engineering technicians	4,720	2.5	(nc)
<b>Communications services, n.e.c. (SIC 4890)</b>			
<b>Scientific and technical personnel</b>	6,120	25	(nc)
<b>Scientists</b>	1,000	4.1	(nc)
Social scientists	10	<	(nc)
All other social scientists	10	<	(nc)
Computer analysts	990	4.1	1

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Communications services, n.e.c. (SIC 4890) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	660	2.7	12
<b>Engineers</b> .....	1,710	7	(nc)
Computer.....	660	2.7	23
Electrical/electronics.....	610	2.5	13
Industrial.....	30	0.1	10
Other, n.e.c.....	410	1.7	(nc)
<b>Technicians</b> .....	2,750	11.2	(nc)
Computer programmer.....	350	1.4	2
Drafter.....	60	0.3	16
Electrical/electronics engineering technician.....	1,440	5.9	8
Mechanical engineering technicians.....	40	0.2	16
All other engineering technicians.....	860	3.5	(nc)
<b>Electric services (SIC 4910)</b>			
<b>Scientific and technical personnel</b> .....	52,770	14.5	(nc)
<b>Scientists</b> .....	5,890	1.6	(nc)
Operations and systems researchers and analysts.....	90	<	0
All other mathematicians.....	50	<	7
Physical scientists.....	1,660	0.5	(nc)
Chemists.....	200	0.1	5
Physicists and astronomers.....	110	<	0
All other physical scientists.....	1,350	0.4	(nc)
Life scientists.....	260	0.1	(nc)
Biological scientists.....	50	<	0
Foresters and conservation scientists.....	100	<	19
All other life scientists.....	110	<	8
Social scientists.....	380	0.1	(nc)
Economists.....	220	0.1	2
Urban and regional planners.....	60	<	3
All other social scientists.....	100	<	5
Computer analysts.....	3,450	1	(nc)
<b>Managers of scientific and technical personnel</b> .....	3,640	1	2

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electric services (SIC 4910) -- continued:</b>			
<b>Engineers.....</b>	20,260	5.6	(nc)
Chemical.....	170	0.1	2
Civil.....	1,210	0.3	1
Computer.....	440	0.1	2
Electrical/electronics.....	8,620	2.4	2
Industrial.....	710	0.2	3
Mechanical.....	1,200	0.3	1
Safety.....	600	0.2	13
Nuclear.....	2,470	0.7	1
Sales.....	40	<	19
Other, n.e.c.....	4,800	1.3	(nc)
<b>Technicians.....</b>	22,980	6.3	(nc)
Computer programmer.....	1,440	0.4	2
Drafter.....	4,140	1.1	(nc)
Surveyor.....	1,430	0.4	(nc)
Electrical/electronics engineering technician.....	5,380	1.5	2
Mechanical engineering technicians.....	790	0.2	1
Civil engineering technician.....	760	0.2	1
All other engineering technicians.....	4,720	1.3	(nc)
Physical and life science technicians.....	4,320	1.2	(nc)
Chemical technicians, except health.....	220	0.1	<
Nuclear technicians.....	690	0.2	0
All other physical and life science technicians.....	3,410	0.9	(nc)
<b>Gas production and distribution (SIC 4920)</b>			
<b>Scientific and technical personnel.....</b>	11,680	8.5	(nc)
<b>Scientists.....</b>	1,700	1.2	(nc)
Operations and systems researchers and analysts.....	50	<	0
Physical scientists.....	140	0.1	(nc)
Geologists, geophysicists, and earth scientists.....	60	<	3
All other physical scientists.....	80	0.1	(nc)
Social scientists.....	40	<	(nc)
All other social scientists.....	40	<	(nc)
Computer analysts.....	1,470	1.1	4
<b>Managers of scientific and technical personnel.....</b>	1,400	1	2

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Gas production and distribution (SIC 4920) -- continued:</b>			
<b>Engineers.....</b>	3,440	2.5	(nc)
Chemical.....	230	0.2	8
Civil.....	560	0.4	5
Computer.....	350	0.3	1
Electrical/electronics.....	810	0.6	1
Industrial.....	250	0.2	8
Mechanical.....	440	0.3	4
Safety.....	190	0.1	13
Other, n.e.c.....	610	0.4	(nc)
<b>Technicians.....</b>	5,140	3.7	(nc)
Computer programmer.....	600	0.4	2
Drafter.....	1,510	1.1	(nc)
Surveyor.....	410	0.3	(nc)
Electrical/electronics engineering technician.....	320	0.2	3
Mechanical engineering technicians.....	560	0.4	8
Civil engineering technician.....	310	0.2	7
All other engineering technicians.....	1,270	0.9	(nc)
Physical and life science technicians.....	160	0.1	(nc)
All other physical and life science technicians.....	160	0.1	(nc)
<b>Combination utility services (SIC 4930)</b>			
<b>Scientific and technical personnel.....</b>	22,990	14.6	(nc)
<b>Scientists.....</b>	3,340	2.1	(nc)
Physical scientists.....	350	0.2	(nc)
Geologists, geophysicists, and earth scientists.....	70	<	3
All other physical scientists.....	280	0.2	(nc)
Life scientists.....	100	0.1	(nc)
All other life scientists.....	100	0.1	(nc)
Social scientists.....	340	0.2	(nc)
All other social scientists.....	340	0.2	(nc)
Computer analysts.....	2,550	1.6	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,320	0.8	6

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Combination utility services (SIC 4930) -- continued:</b>			
<b>Engineers.....</b>	9,400	6	(nc)
Chemical.....	160	0.1	9
Civil.....	560	0.4	2
Computer.....	390	0.3	1
Electrical/electronics.....	4,750	3	2
Industrial.....	600	0.4	1
Mechanical.....	610	0.4	18
Safety.....	170	0.1	7
Nuclear.....	430	0.3	2
Other, n.e.c.....	1,730	1.1	9
<b>Technicians.....</b>	8,930	5.7	(nc)
Computer programmer.....	1,150	0.7	1
Drafter.....	2,330	1.5	(nc)
Surveyor.....	380	0.2	(nc)
Electrical/electronics engineering technician.....	2,070	1.3	2
Mechanical engineering technicians.....	70	<	5
Civil engineering technician.....	160	0.1	2
All other engineering technicians.....	2,130	1.4	(nc)
Physical and life science technicians.....	640	0.4	(nc)
All other physical and life science technicians.....	640	0.4	(nc)
<b>Water supply (SIC 4940)</b>			
<b>Scientific and technical personnel.....</b>	1,330	4.4	(nc)
<b>Scientists.....</b>	230	0.8	(nc)
Physical scientists.....	130	0.4	(nc)
All other physical scientists.....	130	0.4	(nc)
Computer analysts.....	100	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	190	0.6	10
<b>Engineers.....</b>	310	1	(nc)
Civil.....	200	0.7	4
Mechanical.....	30	0.1	7
Other, n.e.c.....	80	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Water supply (SIC 4940) -- continued:</b>			
<b>Technicians.....</b>	600	2	(nc)
Computer programmer.....	70	0.2	7
Drafter.....	200	0.7	(nc)
Electrical/electronics engineering technician.....	40	0.1	2
Civil engineering technician.....	80	0.3	4
All other engineering technicians.....	160	0.5	(nc)
Physical and life science technicians.....	50	0.2	19
Chemical technicians, except health.....	50	0.2	19
<b>Sanitary services (SIC 4950)</b>			
<b>Scientific and technical personnel.....</b>	12,760	7.8	(nc)
<b>Scientists.....</b>	1,760	1.1	(nc)
Physical scientists.....	1,410	0.9	(nc)
Chemists.....	280	0.2	29
Geologists, geophysicists, and earth scientists.....	300	0.2	9
All other physical scientists.....	830	0.5	(nc)
Life scientists.....	190	0.1	(nc)
All other life scientists.....	190	0.1	(nc)
Computer analysts.....	160	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,920	1.2	3
<b>Engineers.....</b>	5,650	3.5	(nc)
Chemical.....	230	0.1	5
Civil.....	470	0.3	6
Electrical/electronics.....	260	0.2	5
Industrial.....	520	0.3	10
Mechanical.....	540	0.3	6
Safety.....	590	0.4	7
Other, n.e.c.....	3,040	1.9	(nc)
<b>Technicians.....</b>	3,430	2.1	(nc)
Computer programmer.....	130	0.1	6
Drafter.....	450	0.3	(nc)
Surveyor.....	40	<	19
Electrical/electronics engineering technician.....	50	<	14
Mechanical engineering technicians.....	60	<	8
All other engineering technicians.....	1,360	0.8	(nc)
Physical and life science technicians.....	1,340	0.8	(nc)
Chemical technicians, except health.....	60	<	8
Nuclear technicians.....	100	0.1	35
All other physical and life science technicians.....	1,180	0.7	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Steam and air-conditioning supply (SIC 4960)</b>			
<b>Scientific and technical personnel</b> .....	30	1.7	(nc)
<b>Engineers</b> .....	30	1.7	(nc)
Other, n.e.c. ....	30	1.7	(nc)
<b>Motor vehicles, parts, and supplies (SIC 5010)</b>			
<b>Scientific and technical personnel</b> .....	4,670	0.9	(nc)
<b>Scientists</b> .....	620	0.1	(nc)
All other mathematicians.....	70	<	1
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	530	0.1	7
<b>Managers of scientific and technical personnel</b> .....	420	0.1	9
<b>Engineers</b> .....	2,060	0.4	(nc)
Electrical/electronics.....	190	<	4
Industrial.....	90	<	10
Mechanical.....	310	0.1	14
Sales.....	540	0.1	19
Other, n.e.c. ....	930	0.2	(nc)
<b>Technicians</b> .....	1,570	0.3	(nc)
Computer programmer.....	430	0.1	6
Drafter.....	160	<	14
Electrical/electronics engineering technician.....	510	0.1	18
Mechanical engineering technicians.....	120	<	8
All other engineering technicians.....	350	0.1	(nc)
<b>Furniture and homefurnishings (SIC 5020)</b>			
<b>Scientific and technical personnel</b> .....	1,180	0.7	(nc)
<b>Scientists</b> .....	200	0.1	4
Computer analysts.....	200	0.1	4
<b>Managers of scientific and technical personnel</b> .....	70	<	6
<b>Engineers</b> .....	330	0.2	(nc)
Sales.....	230	0.1	26
Other, n.e.c. ....	100	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Furniture and homefurnishings (SIC 5020) -- continued:</b>			
<b>Technicians.....</b>	580	0.4	(nc)
Computer programmer.....	150	0.1	3
Drafter.....	240	0.1	7
Electrical/electronics engineering technician.....	70	<	20
Mechanical engineering technicians.....	60	<	32
All other engineering technicians.....	60	<	21
<b>Lumber and construction materials (SIC 5030)</b>			
<b>Scientific and technical personnel.....</b>	2,230	0.8	(nc)
<b>Scientists.....</b>	120	<	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Computer analysts.....	90	<	(nc)
<b>Managers of scientific and technical personnel.....</b>	120	<	15
<b>Engineers.....</b>	730	0.3	(nc)
Mechanical.....	80	<	32
Sales.....	470	0.2	49
Other, n.e.c.....	180	0.1	(nc)
<b>Technicians.....</b>	1,260	0.5	(nc)
Computer programmer.....	100	<	7
Drafter.....	760	0.3	9
Electrical/electronics engineering technician.....	220	0.1	22
All other engineering technicians.....	130	0.1	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Professional and commercial equipment (SIC 5040)</b>			
<b>Scientific and technical personnel.....</b>	109,800	11.9	(nc)
<b>Scientists.....</b>	15,090	1.6	(nc)
Operations and systems researchers and analysts.....	70	<	3
All other mathematicians.....	60	<	0
Physical scientists.....	210	<	(nc)
All other physical scientists.....	210	<	(nc)
Life scientists.....	250	<	(nc)
All other life scientists.....	250	<	(nc)
Social scientists.....	180	<	13
Economists.....	180	<	13
Computer analysts.....	14,320	1.6	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Professional and commercial equipment (SIC 5040) -- continued:</b>			
Managers of scientific and technical personnel.....	4,640	0.5	3
<b>Engineers.....</b>	26,690	2.9	(nc)
Computer.....	4,680	0.5	6
Electrical/electronics.....	5,130	0.6	13
Industrial.....	140	<	3
Mechanical.....	1,500	0.2	14
Sales.....	6,230	0.7	12
Other, n.e.c.....	9,010	1	(nc)
<b>Technicians.....</b>	63,380	6.9	(nc)
Computer programmer.....	26,950	2.9	1
Drafter.....	770	0.1	8
Electrical/electronics engineering technician.....	27,920	3	5
Mechanical engineering technicians.....	1,490	0.2	7
All other engineering technicians.....	5,150	0.6	(nc)
Physical and life science technicians.....	1,100	0.1	(nc)
All other physical and life science technicians.....	1,100	0.1	(nc)
<b>Metals and minerals, except petroleum (SIC 5050)</b>			
Scientific and technical personnel.....	3,000	2	(nc)
<b>Scientists.....</b>	240	0.2	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Computer analysts.....	210	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	360	0.2	31
<b>Engineers.....</b>	910	0.6	(nc)
Electrical/electronics.....	60	<	29
Mechanical.....	140	0.1	39
Sales.....	530	0.4	16
Other, n.e.c.....	180	0.1	(nc)
<b>Technicians.....</b>	1,490	1	(nc)
Computer programmer.....	370	0.2	15
Drafter.....	650	0.4	12
Electrical/electronics engineering technician.....	180	0.1	28
Mechanical engineering technicians.....	60	<	35
All other engineering technicians.....	180	0.1	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Electrical goods (SIC 5060)</b>			
<b>Scientific and technical personnel</b> .....	58,540	10.4	(nc)
<b>Scientists</b> .....	5,370	1	(nc)
Operations and systems researchers and analysts.....	130	<	17
Physical scientists.....	130	<	(nc)
All other physical scientists.....	130	<	(nc)
Social scientists.....	380	0.1	33
Economists.....	380	0.1	33
Computer analysts.....	4,730	0.8	(nc)
<b>Managers of scientific and technical personnel</b> .....	3,570	0.6	2
<b>Engineers</b> .....	22,680	4.1	(nc)
Computer.....	1,030	0.2	6
Electrical/electronics.....	9,640	1.7	5
Industrial.....	140	<	14
Mechanical.....	720	0.1	6
Sales.....	6,430	1.2	6
Other, n.e.c.....	4,720	0.9	(nc)
<b>Technicians</b> .....	26,920	4.8	(nc)
Computer programmer.....	3,280	0.6	(nc)
Drafter.....	680	0.1	3
Electrical/electronics engineering technician.....	20,350	3.6	3
Mechanical engineering technicians.....	500	0.1	3
All other engineering technicians.....	2,110	0.4	(nc)
<b>Hardware, plumbing, and heating equipment (SIC 5070)</b>			
<b>Scientific and technical personnel</b> .....	8,680	2.8	(nc)
<b>Scientists</b> .....	450	0.2	(nc)
Physical scientists.....	50	<	(nc)
All other physical scientists.....	50	<	(nc)
Computer analysts.....	400	0.1	1
<b>Managers of scientific and technical personnel</b> .....	480	0.2	5
<b>Engineers</b> .....	3,830	1.2	(nc)
Electrical/electronics.....	330	0.1	14
Mechanical.....	630	0.2	7
Sales.....	2,370	0.8	16
Other, n.e.c.....	500	0.2	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Hardware, plumbing, and heating equipment (SIC 5070) -- continued:</b>			
<b>Technicians.....</b>	3,920	1.3	(nc)
Computer programmer.....	520	0.2	9
Drafter.....	370	0.1	11
Electrical/electronics engineering technician.....	2,040	0.7	5
Mechanical engineering technicians.....	420	0.1	25
All other engineering technicians.....	570	0.2	(nc)
<b>Machinery, equipment, and supplies (SIC 5080)</b>			
<b>Scientific and technical personnel.....</b>	31,180	3.7	(nc)
<b>Scientists.....</b>	1,100	0.1	(nc)
All other mathematicians.....	10	<	(nc)
Physical scientists.....	130	<	(nc)
All other physical scientists.....	130	<	(nc)
Life scientists.....	50	<	(nc)
All other life scientists.....	50	<	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	900	0.1	12
<b>Managers of scientific and technical personnel.....</b>	1,560	0.2	4
<b>Engineers.....</b>	13,700	1.6	(nc)
Computer.....	130	<	42
Electrical/electronics.....	1,710	0.2	7
Industrial.....	190	<	15
Mechanical.....	3,600	0.4	7
Sales.....	5,300	0.6	9
Other, n.e.c.....	2,770	0.3	(nc)
<b>Technicians.....</b>	14,820	1.8	(nc)
Computer programmer.....	1,280	0.2	6
Drafter.....	1,820	0.2	4
Electrical/electronics engineering technician.....	8,300	1	5
Mechanical engineering technicians.....	1,790	0.2	13
All other engineering technicians.....	1,300	0.2	(nc)
Physical and life science technicians.....	330	<	(nc)
Chemical technicians, except health.....	90	<	30
All other physical and life science technicians.....	240	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Miscellaneous durable goods (SIC 5090)</b>			
<b>Scientific and technical personnel</b> .....	3,150	0.9	(nc)
<b>Scientists</b> .....	390	0.1	(nc)
Physical scientists.....	30	<	(nc)
All other physical scientists.....	30	<	(nc)
Life scientists.....	70	<	(nc)
All other life scientists.....	70	<	(nc)
Computer analysts.....	290	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	250	0.1	5
<b>Engineers</b> .....	400	0.1	(nc)
Electrical/electronics.....	70	<	25
Mechanical.....	60	<	2
Sales.....	80	<	24
Other, n.e.c.....	190	0.1	(nc)
<b>Technicians</b> .....	2,110	0.6	(nc)
Computer programmer.....	590	0.2	3
Drafter.....	230	0.1	12
Electrical/electronics engineering technician.....	840	0.3	8
Mechanical engineering technicians.....	60	<	7
All other engineering technicians.....	340	0.1	27
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Paper and paper products (SIC 5110)</b>			
<b>Scientific and technical personnel</b> .....	3,370	1.2	(nc)
<b>Scientists</b> .....	1,130	0.4	(nc)
Social scientists.....	90	<	(nc)
Economists.....	70	<	0
All other social scientists.....	20	<	(nc)
Computer analysts.....	1,040	0.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	200	0.1	4
<b>Engineers</b> .....	530	0.2	(nc)
Electrical/electronics.....	70	<	22
Mechanical.....	80	<	6
Sales.....	150	0.1	10
Other, n.e.c.....	230	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Paper and paper products (SIC 5110) -- continued:</b>			
<b>Technicians.....</b>	1,510	0.6	(nc)
Computer programmer.....	860	0.3	3
Electrical/electronics engineering technician.....	490	0.2	20
Mechanical engineering technicians.....	80	<	28
All other engineering technicians.....	80	<	(nc)
<b>Drugs, proprietaries, and sundries (SIC 5120)</b>			
<b>Scientific and technical personnel.....</b>	5,030	2.1	(nc)
<b>Scientists.....</b>	1,530	0.7	(nc)
All other mathematicians.....	40	<	(nc)
Physical scientists.....	380	0.2	(nc)
Chemists.....	70	<	10
All other physical scientists.....	310	0.1	12
Life scientists.....	450	0.2	(nc)
Biological scientists.....	70	<	28
Medical scientists.....	80	<	49
All other life scientists.....	300	0.1	12
Social scientists.....	60	<	21
Economists.....	60	<	21
Computer analysts.....	600	0.3	4
<b>Managers of scientific and technical personnel.....</b>	510	0.2	4
<b>Engineers.....</b>	420	0.2	(nc)
Computer.....	90	<	46
Sales.....	150	0.1	35
Other, n.e.c.....	180	0.1	(nc)
<b>Technicians.....</b>	2,570	1.1	(nc)
Computer programmer.....	1,610	0.7	4
Electrical/electronics engineering technician.....	120	0.1	23
Mechanical engineering technicians.....	90	<	21
All other engineering technicians.....	200	0.1	(nc)
Physical and life science technicians.....	550	0.2	(nc)
All other physical and life science technicians.....	550	0.2	(nc)
<b>Apparel, piece goods, and notions (SIC 5130)</b>			
<b>Scientific and technical personnel.....</b>	1,840	0.8	(nc)
<b>Scientists.....</b>	520	0.2	(nc)
All other mathematicians.....	40	<	(nc)
Computer analysts.....	480	0.2	6

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Apparel, piece goods, and notions (SIC 5130) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	170	0.1	2
<b>Engineers</b> .....	450	0.2	(nc)
Computer.....	40	<	0
Other, n.e.c.....	410	0.2	(nc)
<b>Technicians</b> .....	700	0.3	(nc)
Computer programmer.....	500	0.2	8
Drafter.....	50	<	6
Electrical/electronics engineering technician.....	50	<	33
All other engineering technicians.....	50	<	(nc)
Physical and life science technicians.....	50	<	(nc)
All other physical and life science technicians.....	50	<	(nc)
<b>Groceries and related products (SIC 5140)</b>			
<b>Scientific and technical personnel</b> .....	4,590	0.5	(nc)
<b>Scientists</b> .....	1,320	0.1	(nc)
Physical scientists.....	400	<	(nc)
All other physical scientists.....	400	<	(nc)
Life scientists.....	120	<	(nc)
All other life scientists.....	120	<	(nc)
Social scientists.....	30	<	(nc)
All other social scientists.....	30	<	(nc)
Computer analysts.....	770	0.1	2
<b>Managers of scientific and technical personnel</b> .....	740	0.1	3
<b>Engineers</b> .....	410	<	(nc)
Mechanical.....	110	<	5
Other, n.e.c.....	300	<	(nc)
<b>Technicians</b> .....	2,120	0.2	(nc)
Computer programmer.....	1,270	0.1	2
Drafter.....	70	<	7
Electrical/electronics engineering technician.....	140	<	8
Mechanical engineering technicians.....	50	<	11
All other engineering technicians.....	230	<	(nc)
Physical and life science technicians.....	360	<	(nc)
All other physical and life science technicians.....	360	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Farm-product raw materials (SIC 5150)</b>			
<b>Scientific and technical personnel</b> .....	560	0.5	(nc)
<b>Scientists</b> .....	180	0.2	(nc)
Life scientists.....	60	0.1	(nc)
All other life scientists.....	60	0.1	(nc)
Computer analysts.....	120	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	40	<	7
<b>Technicians</b> .....	340	0.3	(nc)
Computer programmer.....	220	0.2	4
Mechanical engineering technicians.....	40	<	49
All other engineering technicians.....	30	<	(nc)
Physical and life science technicians.....	50	0.1	(nc)
All other physical and life science technicians.....	50	0.1	(nc)
<b>Chemicals and allied products (SIC 5160)</b>			
<b>Scientific and technical personnel</b> .....	7,200	4.7	(nc)
<b>Scientists</b> .....	1,810	1.2	(nc)
Physical scientists.....	1,610	1.1	(nc)
Chemists.....	150	0.1	9
All other physical scientists.....	1,460	1	(nc)
Life scientists.....	100	0.1	(nc)
All other life scientists.....	100	0.1	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	90	0.1	4
<b>Managers of scientific and technical personnel</b> .....	430	0.3	9
<b>Engineers</b> .....	2,050	1.3	(nc)
Chemical.....	60	<	21
Electrical/electronics.....	80	0.1	46
Mechanical.....	120	0.1	37
Sales.....	760	0.5	18
Other, n.e.c.....	1,030	0.7	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Chemicals and allied products (SIC 5160) -- continued:</b>			
<b>Technicians.....</b>	2,910	1.9	(nc)
Computer programmer.....	190	0.1	5
Drafter.....	80	0.1	3
Electrical/electronics engineering technician.....	920	0.6	5
Mechanical engineering technicians.....	40	<	8
All other engineering technicians.....	440	0.3	(nc)
Physical and life science technicians.....	1,240	0.8	(nc)
Chemical technicians, except health.....	150	0.1	23
All other physical and life science technicians.....	1,090	0.7	5
<b>Petroleum and petroleum products (SIC 5170)</b>			
<b>Scientific and technical personnel.....</b>	2,200	1.4	(nc)
<b>Scientists.....</b>	430	0.3	(nc)
Physical scientists.....	120	0.1	(nc)
All other physical scientists.....	120	0.1	(nc)
Social scientists.....	50	<	10
Economists.....	50	<	10
Computer analysts.....	260	0.2	3
<b>Managers of scientific and technical personnel.....</b>	170	0.1	11
<b>Engineers.....</b>	920	0.6	(nc)
Mechanical.....	50	<	12
Sales.....	230	0.2	7
Other, n.e.c.....	640	0.4	(nc)
<b>Technicians.....</b>	680	0.5	(nc)
Computer programmer.....	150	0.1	12
Electrical/electronics engineering technician.....	170	0.1	10
All other engineering technicians.....	180	0.1	(nc)
Physical and life science technicians.....	180	0.1	(nc)
All other physical and life science technicians.....	180	0.1	(nc)
<b>Beer, wine, and distilled beverages (SIC 5180)</b>			
<b>Scientific and technical personnel.....</b>	350	0.2	(nc)
<b>Scientists.....</b>	110	0.1	7
Computer analysts.....	110	0.1	7
<b>Managers of scientific and technical personnel.....</b>	50	<	8

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Beer, wine, and distilled beverages (SIC 5180) -- continued:</b>			
Engineers.....	60	<	22
Sales.....	60	<	22
Technicians.....	130	0.1	(nc)
Computer programmer.....	90	0.1	9
All other engineering technicians.....	40	<	(nc)
<b>Misc. nondurable goods (SIC 5190)</b>			
Scientific and technical personnel.....	4,580	0.8	(nc)
Scientists.....	1,440	0.3	(nc)
Physical scientists.....	190	<	(nc)
All other physical scientists.....	190	<	(nc)
Life scientists.....	580	0.1	(nc)
Agricultural scientists.....	240	<	20
All other life scientists.....	340	0.1	(nc)
Computer analysts.....	670	0.1	13
Managers of scientific and technical personnel.....	300	0.1	4
Engineers.....	560	0.1	(nc)
Electrical/electronics.....	180	<	48
Sales.....	130	<	27
Other, n.e.c.....	250	0.1	(nc)
Technicians.....	2,280	0.4	(nc)
Computer programmer.....	860	0.2	4
Drafter.....	50	<	5
Electrical/electronics engineering technician.....	410	0.1	18
Physical and life science technicians.....	960	0.2	(nc)
Biological science technician.....	140	<	45
All other physical and life science technicians.....	820	0.2	(nc)
<b>Lumber and other building materials (SIC 5210)</b>			
Scientific and technical personnel.....	2,890	0.5	(nc)
Scientists.....	590	0.1	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
Computer analysts.....	580	0.1	(nc)
Managers of scientific and technical personnel.....	280	0.1	2

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Lumber and other building materials (SIC 5210) -- continued:</b>			
<b>Engineers</b> .....	890	0.2	(nc)
Sales.....	130	<	9
Other, n.e.c.....	760	0.1	(nc)
<b>Technicians</b> .....	1,130	0.2	(nc)
Computer programmer.....	200	<	2
Drafter.....	830	0.1	6
All other engineering technicians.....	100	<	(nc)
<b>Paint, glass, and wallpaper stores (SIC 5230)</b>			
<b>Scientific and technical personnel</b> .....	150	0.2	(nc)
<b>Scientists</b> .....	70	0.1	(nc)
Physical scientists.....	40	0.1	(nc)
All other physical scientists.....	40	0.1	(nc)
Computer analysts.....	30	0.1	(nc)
<b>Engineers</b> .....	10	<	(nc)
Other, n.e.c.....	10	<	(nc)
<b>Technicians</b> .....	70	0.1	(nc)
Drafter.....	30	0.1	12
Physical and life science technicians.....	40	0.1	(nc)
All other physical and life science technicians.....	40	0.1	(nc)
<b>Hardware stores (SIC 5250)</b>			
<b>Scientific and technical personnel</b> .....	80	0.1	(nc)
<b>Scientists</b> .....	50	<	(nc)
Computer analysts.....	50	<	(nc)
<b>Technicians</b> .....	30	<	(nc)
All other engineering technicians.....	30	<	(nc)
<b>Retail nurseries and garden stores (SIC 5260)</b>			
<b>Scientific and technical personnel</b> .....	90	0.1	(nc)
<b>Scientists</b> .....	50	0.1	(nc)
Computer analysts.....	50	0.1	(nc)
<b>Technicians</b> .....	40	<	7
Drafter.....	40	<	7

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Mobile home dealers (SIC 5270)</b>			
<b>Scientific and technical personnel</b> .....	40	0.1	(nc)
<b>Technicians</b> .....	40	0.1	(nc)
All other engineering technicians.....	40	0.1	(nc)
<b>Department stores (SIC 5310)</b>			
<b>Scientific and technical personnel</b> .....	5,150	0.2	(nc)
<b>Scientists</b> .....	2,450	0.1	(nc)
Computer analysts.....	2,450	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	840	<	3
<b>Engineers</b> .....	800	<	(nc)
Other, n.e.c.....	800	<	(nc)
<b>Technicians</b> .....	1,060	<	<
Computer programmer.....	1,060	<	<
<b>Variety stores (SIC 5330)</b>			
<b>Scientific and technical personnel</b> .....	130	0.1	(nc)
<b>Scientists</b> .....	20	<	(nc)
Computer analysts.....	20	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	40	<	3
<b>Technicians</b> .....	70	0.1	19
Computer programmer.....	70	0.1	19
<b>Misc. general merchandise stores (SIC 5390)</b>			
<b>Scientific and technical personnel</b> .....	430	0.2	(nc)
<b>Scientists</b> .....	370	0.2	(nc)
Computer analysts.....	370	0.2	(nc)
<b>Technicians</b> .....	60	<	(nc)
All other engineering technicians.....	60	<	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Grocery stores (SIC 5410)</b>			
<b>Scientific and technical personnel</b> .....	2,510	0.1	(nc)
<b>Scientists</b> .....	690	<	(nc)
Computer analysts.....	690	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	340	<	3
<b>Engineers</b> .....	770	<	(nc)
Sales.....	230	<	30
Other, n.e.c.....	540	<	(nc)
<b>Technicians</b> .....	710	<	4
Computer programmer.....	710	<	4
<b>Candy, nut and confectionery stores (SIC 5440)</b>			
<b>Scientific and technical personnel</b> .....	30	0.1	(nc)
<b>Scientists</b> .....	30	0.1	(nc)
Computer analysts.....	30	0.1	(nc)
<b>Dairy product stores (SIC 5450)</b>			
<b>Scientific and technical personnel</b> .....	20	0.2	(nc)
<b>Scientists</b> .....	20	0.2	(nc)
Computer analysts.....	20	0.2	(nc)
<b>Miscellaneous food stores (SIC 5490)</b>			
<b>Scientific and technical personnel</b> .....	260	0.3	(nc)
<b>Scientists</b> .....	120	0.1	(nc)
Computer analysts.....	120	0.1	(nc)
<b>Engineers</b> .....	80	0.1	28
Sales.....	80	0.1	28
<b>Technicians</b> .....	60	0.1	(nc)
All other engineering technicians.....	60	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>New and used car dealers (SIC 5510)</b>			
<b>Scientific and technical personnel</b> .....	1,110	0.1	(nc)
<b>Scientists</b> .....	60	<	(nc)
Computer analysts.....	60	<	(nc)
<b>Technicians</b> .....	1,050	0.1	(nc)
Mechanical engineering technicians.....	860	0.1	20
All other engineering technicians.....	190	<	(nc)
<b>Used car dealers (SIC 5520)</b>			
<b>Scientific and technical personnel</b> .....	180	0.2	(nc)
<b>Scientists</b> .....	80	0.1	(nc)
Computer analysts.....	80	0.1	(nc)
<b>Technicians</b> .....	100	0.1	(nc)
All other engineering technicians.....	100	0.1	(nc)
<b>Auto and home supply stores (SIC 5530)</b>			
<b>Scientific and technical personnel</b> .....	830	0.2	(nc)
<b>Scientists</b> .....	130	<	(nc)
Computer analysts.....	130	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	30	<	14
<b>Technicians</b> .....	670	0.2	(nc)
Computer programmer.....	310	0.1	4
Drafter.....	40	<	0
All other engineering technicians.....	320	0.1	(nc)
<b>Gasoline service stations (SIC 5540)</b>			
<b>Scientific and technical personnel</b> .....	100	<	5
<b>Technicians</b> .....	100	<	5
Computer programmer.....	100	<	5
<b>Boat dealers (SIC 5550)</b>			
<b>Scientific and technical personnel</b> .....	130	0.4	(nc)
<b>Technicians</b> .....	130	0.4	(nc)
Mechanical engineering technicians.....	90	0.2	30
All other engineering technicians.....	40	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Recreational vehicle dealers (SIC 5560)</b>			
<b>Scientific and technical personnel</b> .....	60	0.2	8
<b>Technicians</b> .....	60	0.2	8
Mechanical engineering technicians.....	60	0.2	8
<b>Automotive dealers, n.e.c. (SIC 5590)</b>			
<b>Scientific and technical personnel</b> .....	40	0.4	(nc)
<b>Technicians</b> .....	40	0.4	(nc)
All other engineering technicians.....	40	0.4	(nc)
<b>Men's and boys' clothing stores (SIC 5610)</b>			
<b>Scientific and technical personnel</b> .....	130	0.2	(nc)
<b>Scientists</b> .....	90	0.1	(nc)
Computer analysts.....	90	0.1	(nc)
<b>Technicians</b> .....	40	0.1	13
Computer programmer.....	40	0.1	13
<b>Women's clothing stores (SIC 5620)</b>			
<b>Scientific and technical personnel</b> .....	450	0.2	(nc)
<b>Scientists</b> .....	310	0.1	(nc)
Computer analysts.....	310	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	40	<	4
<b>Technicians</b> .....	100	<	5
Computer programmer.....	100	<	5
<b>Women's accessory and specialty stores (SIC 5630)</b>			
<b>Scientific and technical personnel</b> .....	130	0.2	(nc)
<b>Scientists</b> .....	30	0.1	(nc)
Computer analysts.....	30	0.1	(nc)
<b>Engineers</b> .....	100	0.2	32
Sales.....	100	0.2	32

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Children's and infants' wear stores (SIC 5640)</b>			
<b>Scientific and technical personnel</b> .....	70	0.2	(nc)
<b>Scientists</b> .....	70	0.2	(nc)
Computer analysts.....	70	0.2	(nc)
<b>Family clothing stores (SIC 5650)</b>			
<b>Scientific and technical personnel</b> .....	600	0.2	(nc)
<b>Scientists</b> .....	100	<	3
Computer analysts.....	100	<	3
<b>Managers of scientific and technical personnel</b> .....	90	<	5
<b>Technicians</b> .....	410	0.1	(nc)
Computer programmer.....	370	0.1	3
All other engineering technicians.....	40	<	(nc)
<b>Shoe stores (SIC 5660)</b>			
<b>Scientific and technical personnel</b> .....	280	0.1	(nc)
<b>Scientists</b> .....	60	<	9
Computer analysts.....	60	<	9
<b>Managers of scientific and technical personnel</b> .....	40	<	31
<b>Technicians</b> .....	180	0.1	(nc)
Computer programmer.....	140	0.1	8
All other engineering technicians.....	40	<	(nc)
<b>Misc. apparel and accessory stores (SIC 5690)</b>			
<b>Scientific and technical personnel</b> .....	60	0.1	(nc)
<b>Scientists</b> .....	60	0.1	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Furniture and homefurnishings stores (SIC 5710)</b>			
<b>Scientific and technical personnel</b> .....	650	0.1	(nc)
<b>Scientists</b> .....	110	<	2
Computer analysts.....	110	<	2
<b>Managers of scientific and technical personnel</b> .....	50	<	8

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Furniture and homefurnishings stores (SIC 5710) -- continued:</b>			
<b>Engineers</b> .....	40	<	24
Sales.....	40	<	24
<b>Technicians</b> .....	450	0.1	(nc)
Computer programmer.....	120	<	6
Drafter.....	270	0.1	15
All other engineering technicians.....	60	<	(nc)
<b>Household appliance stores (SIC 5720)</b>			
<b>Scientific and technical personnel</b> .....	150	0.2	(nc)
<b>Scientists</b> .....	60	0.1	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Technicians</b> .....	90	0.1	(nc)
All other engineering technicians.....	90	0.1	(nc)
<b>Radio, television, and computer stores (SIC 5730)</b>			
<b>Scientific and technical personnel</b> .....	13,200	3	(nc)
<b>Scientists</b> .....	1,840	0.4	(nc)
Computer analysts.....	1,840	0.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	620	0.1	3
<b>Engineers</b> .....	3,800	0.9	(nc)
Computer.....	940	0.2	11
Electrical/electronics.....	340	0.1	15
Sales.....	1,080	0.2	11
Other, n.e.c.....	1,440	0.3	(nc)
<b>Technicians</b> .....	6,940	1.6	(nc)
Computer programmer.....	4,410	1	8
Drafter.....	30	<	41
Electrical/electronics engineering technician.....	1,750	0.4	16
All other engineering technicians.....	750	0.2	(nc)
<b>Eating and drinking places (SIC 5810)</b>			
<b>Scientific and technical personnel</b> .....	660	<	5
<b>Scientists</b> .....	660	<	5
Computer analysts.....	660	<	5

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Drug stores and proprietary stores (SIC 5910)</b>			
<b>Scientific and technical personnel</b> .....	920	0.2	(nc)
<b>Scientists</b> .....	420	0.1	(nc)
Computer analysts.....	420	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	140	<	6
<b>Engineers</b> .....	110	<	(nc)
Other, n.e.c.....	110	<	(nc)
<b>Technicians</b> .....	250	<	(nc)
Computer programmer.....	150	<	4
Electrical/electronics engineering technician.....	40	<	0
All other engineering technicians.....	60	<	(nc)
<b>Used merchandise stores (SIC 5930)</b>			
<b>Scientific and technical personnel</b> .....	90	0.1	(nc)
<b>Scientists</b> .....	40	<	(nc)
Computer analysts.....	40	<	(nc)
<b>Technicians</b> .....	50	<	(nc)
All other engineering technicians.....	50	<	(nc)
<b>Miscellaneous shopping goods stores (SIC 5940)</b>			
<b>Scientific and technical personnel</b> .....	1,360	0.1	(nc)
<b>Scientists</b> .....	460	<	8
Computer analysts.....	460	<	8
<b>Managers of scientific and technical personnel</b> .....	240	<	8
<b>Technicians</b> .....	660	0.1	(nc)
Computer programmer.....	570	0.1	4
Drafter.....	90	<	34

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Nonstore retailers (SIC 5960)</b>			
<b>Scientific and technical personnel</b> .....	4,920	1.4	(nc)
<b>Scientists</b> .....	1,680	0.5	(nc)
Statisticians.....	40	<	3
All other mathematicians.....	10	<	(nc)
Social scientists.....	40	<	4
Economists.....	40	<	4
Computer analysts.....	1,590	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	410	0.1	1
<b>Engineers</b> .....	480	0.1	(nc)
Electrical/electronics.....	60	<	0
Mechanical.....	60	<	18
Other, n.e.c.....	360	0.1	(nc)
<b>Technicians</b> .....	2,350	0.7	(nc)
Computer programmer.....	1,900	0.5	3
Electrical/electronics engineering technician.....	260	0.1	3
All other engineering technicians.....	190	0.1	(nc)
<b>Fuel dealers (SIC 5980)</b>			
<b>Scientific and technical personnel</b> .....	50	0.1	(nc)
<b>Scientists</b> .....	50	0.1	(nc)
Computer analysts.....	50	0.1	(nc)
<b>Retail stores, n.e.c. (SIC 5990)</b>			
<b>Scientific and technical personnel</b> .....	1,110	0.2	(nc)
<b>Scientists</b> .....	270	0.1	(nc)
Social scientists.....	20	<	(nc)
All other social scientists.....	20	<	(nc)
Computer analysts.....	250	0.1	4
<b>Managers of scientific and technical personnel</b> .....	110	<	13
<b>Engineers</b> .....	180	<	(nc)
Electrical/electronics.....	60	<	3
Mechanical.....	30	<	29
Other, n.e.c.....	90	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Retail stores, n.e.c. (SIC 5990) -- continued:</b>			
Technicians.....	550	0.1	(nc)
Computer programmer.....	140	<	10
Drafter.....	50	<	27
Electrical/electronics engineering technician.....	170	<	18
All other engineering technicians.....	100	<	(nc)
Physical and life science technicians.....	90	<	(nc)
All other physical and life science technicians.....	90	<	(nc)

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.5. Employed scientists, engineers, technicians (SETs), and SET managers,  
in SICs 60-67 (finance, insurance, and real estate),  
and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Central reserve depositories (SIC 6010)</b>			
Scientific and technical personnel.....	1,810	7.7	(nc)
<b>Scientists</b> .....	1,140	4.8	(nc)
All other mathematicians.....	160	0.7	(nc)
Social scientists.....	210	0.9	2
Economists.....	210	0.9	2
Computer analysts.....	770	3.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	150	0.6	0
<b>Engineers</b> .....	120	0.5	0
Computer.....	120	0.5	0
<b>Technicians</b> .....	400	1.7	<
Computer programmer.....	400	1.7	<
<b>Commercial banks (SIC 6020)</b>			
Scientific and technical personnel.....	37,880	2.6	(nc)
<b>Scientists</b> .....	23,630	1.6	(nc)
Operations and systems researchers and analysts.....	5,800	0.4	3
Social scientists.....	3,770	0.3	9
Economists.....	3,770	0.3	9
Computer analysts.....	14,060	1	(nc)
<b>Managers of scientific and technical personnel</b> .....	3,620	0.3	2
<b>Engineers</b> .....	4,710	0.3	(nc)
Computer.....	4,060	0.3	1
Electrical/electronics.....	140	<	2
Industrial.....	200	<	2
Other, n.e.c.....	310	<	(nc)
<b>Technicians</b> .....	5,920	0.4	(nc)
Computer programmer.....	5,820	0.4	3
All other engineering technicians.....	100	<	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Savings institutions (SIC 6030)</b>			
<b>Scientific and technical personnel</b> .....	4,490	1.8	(nc)
<b>Scientists</b> .....	3,250	1.3	(nc)
Operations and systems researchers and analysts.....	320	0.1	3
Social scientists.....	200	0.1	3
Economists.....	200	0.1	3
Computer analysts.....	2,730	1.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	390	0.2	3
<b>Engineers</b> .....	290	0.1	3
Computer.....	290	0.1	3
<b>Technicians</b> .....	560	0.2	5
Computer programmer.....	560	0.2	5
<b>Credit unions (SIC 6060)</b>			
<b>Scientific and technical personnel</b> .....	1,900	1.1	(nc)
<b>Scientists</b> .....	1,070	0.6	(nc)
Operations and systems researchers and analysts.....	60	<	8
Social scientists.....	70	<	26
Economists.....	70	<	26
Computer analysts.....	940	0.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	350	0.2	4
<b>Engineers</b> .....	80	<	5
Computer.....	80	<	5
<b>Technicians</b> .....	400	0.2	5
Computer programmer.....	400	0.2	5
<b>Foreign banks and branches and agencies (SIC 6080)</b>			
<b>Scientific and technical personnel</b> .....	750	2.7	(nc)
<b>Scientists</b> .....	450	1.6	(nc)
Social scientists.....	30	0.1	(nc)
All other social scientists.....	30	0.1	(nc)
Computer analysts.....	420	1.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	130	0.5	3

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Foreign banks and branches and agencies (SIC 6080) -- continued:</b>			
Engineers.....	10	<	(nc)
Other, n.e.c.....	10	<	(nc)
Technicians.....	160	0.6	19
Computer programmer.....	160	0.6	19
<b>Functions closely related to banking (SIC 6090)</b>			
Scientific and technical personnel.....	3,680	4.3	(nc)
Scientists.....	1,870	2.2	(nc)
Operations and systems researchers and analysts.....	80	0.1	0
Social scientists.....	220	0.3	(nc)
Economists.....	130	0.2	6
All other social scientists.....	90	0.1	(nc)
Computer analysts.....	1,570	1.8	(nc)
Managers of scientific and technical personnel.....	890	1	1
Engineers.....	100	0.1	(nc)
Computer.....	40	0.1	7
Other, n.e.c.....	60	0.1	(nc)
Technicians.....	820	1	(nc)
Computer programmer.....	780	0.9	2
All other engineering technicians.....	40	0.1	(nc)
<b>Federal and federally sponsored credit (SIC 6110)</b>			
Scientific and technical personnel.....	1,030	4.7	(nc)
Scientists.....	840	3.8	(nc)
Social scientists.....	30	0.1	(nc)
All other social scientists.....	30	0.1	(nc)
Computer analysts.....	810	3.7	(nc)
Technicians.....	190	0.9	9
Computer programmer.....	190	0.9	9

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Personal credit institutions (SIC 6140)</b>			
<b>Scientific and technical personnel</b> .....	4,660	2.5	(nc)
<b>Scientists</b> .....	3,140	1.7	(nc)
Operations and systems researchers and analysts.....	130	0.1	5
Statisticians.....	490	0.3	<
All other mathematicians.....	120	0.1	22
Social scientists.....	440	0.2	2
Economists.....	440	0.2	2
Computer analysts.....	1,960	1	(nc)
<b>Managers of scientific and technical personnel</b> .....	210	0.1	11
<b>Engineers</b> .....	90	0.1	(nc)
Computer.....	60	<	4
Other, n.e.c.....	30	<	(nc)
<b>Technicians</b> .....	1,220	0.7	1
Computer programmer.....	1,220	0.7	1
<b>Business credit institutions (SIC 6150)</b>			
<b>Scientific and technical personnel</b> .....	4,650	3.7	(nc)
<b>Scientists</b> .....	2,250	1.8	(nc)
Operations and systems researchers and analysts.....	320	0.3	2
All other mathematicians.....	60	0.1	(nc)
Social scientists.....	180	0.1	4
Economists.....	180	0.1	4
Computer analysts.....	1,690	1.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	430	0.3	4
<b>Engineers</b> .....	660	0.5	(nc)
Computer.....	150	0.1	6
Other, n.e.c.....	510	0.4	(nc)
<b>Technicians</b> .....	1,310	1.1	(nc)
Computer programmer.....	1,220	1	4
Physical and life science technicians.....	90	0.1	(nc)
All other physical and life science technicians.....	90	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Mortgage bankers and brokers (SIC 6160)</b>			
<b>Scientific and technical personnel</b> .....	5,720	1.6	(nc)
<b>Scientists</b> .....	3,250	0.9	(nc)
Operations and systems researchers and analysts.....	240	0.1	1
All other mathematicians.....	40	<	(nc)
Social scientists.....	390	0.1	3
Economists.....	390	0.1	3
Computer analysts.....	2,580	0.7	(nc)
<b>Managers of scientific and technical personnel</b> .....	370	0.1	4
<b>Engineers</b> .....	980	0.3	(nc)
Computer.....	910	0.3	1
Other, n.e.c.....	70	<	(nc)
<b>Technicians</b> .....	1,120	0.3	(nc)
Computer programmer.....	1,030	0.3	7
All other engineering technicians.....	90	<	(nc)
<b>Security brokers and dealers (SIC 6210)</b>			
<b>Scientific and technical personnel</b> .....	23,440	4.8	(nc)
<b>Scientists</b> .....	15,810	3.2	(nc)
Operations and systems researchers and analysts.....	5,750	1.2	9
Statisticians.....	60	<	0
All other mathematicians.....	120	<	(nc)
Social scientists.....	3,170	0.7	3
Economists.....	3,170	0.7	3
Computer analysts.....	6,710	1.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,400	0.3	3
<b>Engineers</b> .....	840	0.2	(nc)
Computer.....	490	0.1	3
Electrical/electronics.....	70	<	0
Other, n.e.c.....	280	0.1	(nc)
<b>Technicians</b> .....	5,390	1.1	(nc)
Computer programmer.....	5,200	1.1	<
All other engineering technicians.....	190	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Commodity contracts, brokers, and dealers (SIC 6220)</b>			
<b>Scientific and technical personnel</b> .....	750	4.1	(nc)
<b>Scientists</b> .....	320	1.8	(nc)
Operations and systems researchers and analysts.....	120	0.7	13
Social scientists.....	100	0.6	9
Economists.....	100	0.6	9
Computer analysts.....	100	0.6	(nc)
<b>Technicians</b> .....	430	2.4	6
Computer programmer.....	430	2.4	6
<b>Security and commodity exchanges (SIC 6230)</b>			
<b>Scientific and technical personnel</b> .....	620	7.4	(nc)
<b>Scientists</b> .....	430	5.1	(nc)
Operations and systems researchers and analysts.....	60	0.7	0
Social scientists.....	160	1.9	0
Economists.....	160	1.9	0
Computer analysts.....	210	2.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	120	1.4	0
<b>Engineers</b> .....	70	0.8	(nc)
Other, n.e.c.....	70	0.8	(nc)
<b>Security and commodity services (SIC 6280)</b>			
<b>Scientific and technical personnel</b> .....	12,360	8.6	(nc)
<b>Scientists</b> .....	5,780	4	(nc)
Operations and systems researchers and analysts.....	540	0.4	11
Statisticians.....	620	0.4	5
Social scientists.....	1,000	0.7	8
Economists.....	1,000	0.7	8
Computer analysts.....	3,620	2.5	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,170	0.8	18
<b>Engineers</b> .....	1,300	0.9	(nc)
Computer.....	1,180	0.8	14
Other, n.e.c.....	120	0.1	(nc)
<b>Technicians</b> .....	4,110	2.9	(nc)
Computer programmer.....	3,990	2.8	5
All other engineering technicians.....	120	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Life insurance (SIC 6310)</b>			
<b>Scientific and technical personnel</b> .....	44,260	11.5	(nc)
<b>Scientists</b> .....	27,560	7.2	(nc)
Operations and systems researchers and analysts.....	2,820	0.7	3
Statisticians.....	200	0.1	3
All other mathematicians.....	5,240	1.4	(nc)
Social scientists.....	840	0.2	(nc)
Economists.....	340	0.1	17
All other social scientists.....	500	0.1	(nc)
Computer analysts.....	18,460	4.8	(nc)
<b>Managers of scientific and technical personnel</b> .....	4,900	1.3	2
<b>Engineers</b> .....	4,210	1.1	(nc)
Computer.....	3,890	1	3
Mechanical.....	90	<	21
Other, n.e.c.....	230	0.1	(nc)
<b>Technicians</b> .....	7,590	2	(nc)
Computer programmer.....	6,780	1.8	1
All other engineering technicians.....	420	0.1	(nc)
Physical and life science technicians.....	90	<	(nc)
All other physical and life science technicians.....	90	<	(nc)
Mathematical technicians.....	300	0.1	0
<b>Medical service and health insurance (SIC 6320)</b>			
<b>Scientific and technical personnel</b> .....	25,870	7.2	(nc)
<b>Scientists</b> .....	15,610	4.4	(nc)
Operations and systems researchers and analysts.....	2,850	0.8	5
Statisticians.....	480	0.1	3
All other mathematicians.....	1,320	0.4	(nc)
Social scientists.....	340	0.1	(nc)
Economists.....	190	0.1	3
All other social scientists.....	150	<	(nc)
Computer analysts.....	10,620	3	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,700	0.5	1
<b>Engineers</b> .....	1,370	0.4	(nc)
Computer.....	1,070	0.3	2
Other, n.e.c.....	300	0.1	(nc)

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Medical service and health insurance (SIC 6320) -- continued:</b>			
<b>Technicians.....</b>	7,190	2	(nc)
Computer programmer.....	6,850	1.9	4
All other engineering technicians.....	120	<	(nc)
Physical and life science technicians.....	120	<	(nc)
All other physical and life science technicians.....	120	<	(nc)
Mathematical technicians.....	100	<	34
<b>Fire, marine, and casualty insurance (SIC 6330)</b>			
<b>Scientific and technical personnel.....</b>	34,040	6.1	(nc)
<b>Scientists.....</b>	21,700	3.9	(nc)
Operations and systems researchers and analysts.....	980	0.2	5
Statisticians.....	460	0.1	3
All other mathematicians.....	1,420	0.3	(nc)
Social scientists.....	290	0.1	(nc)
Economists.....	150	<	2
All other social scientists.....	140	<	0
Computer analysts.....	18,550	3.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	2,260	0.4	2
<b>Engineers.....</b>	2,860	0.5	(nc)
Civil.....	60	<	2
Computer.....	1,090	0.2	1
Safety.....	1,070	0.2	5
Other, n.e.c.....	640	0.1	(nc)
<b>Technicians.....</b>	7,220	1.3	(nc)
Computer programmer.....	6,950	1.3	2
Drafter.....	100	<	1
Surveyor.....	40	<	13
All other engineering technicians.....	130	<	(nc)
<b>Surety insurance (SIC 6350)</b>			
<b>Scientific and technical personnel.....</b>	1,240	5.4	(nc)
<b>Scientists.....</b>	450	2	(nc)
Operations and systems researchers and analysts.....	40	0.2	3
All other mathematicians.....	70	0.3	(nc)
Computer analysts.....	340	1.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	90	0.4	2

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Surety insurance (SIC 6350) -- continued:</b>			
<b>Engineers</b> .....	150	0.7	4
Computer.....	150	0.7	4
<b>Technicians</b> .....	550	2.4	20
Computer programmer.....	550	2.4	20
<b>Title insurance (SIC 6360)</b>			
<b>Scientific and technical personnel</b> .....	870	1	(nc)
<b>Scientists</b> .....	500	0.6	(nc)
Computer analysts.....	500	0.6	(nc)
<b>Engineers</b> .....	50	0.1	8
Computer.....	50	0.1	8
<b>Technicians</b> .....	320	0.4	(nc)
Computer programmer.....	280	0.3	9
All other engineering technicians.....	40	<	(nc)
<b>Pension, health, and welfare funds (SIC 6370)</b>			
<b>Scientific and technical personnel</b> .....	2,690	5.4	(nc)
<b>Scientists</b> .....	1,580	3.2	(nc)
Operations and systems researchers and analysts.....	130	0.3	1
All other mathematicians.....	300	0.6	(nc)
Computer analysts.....	1,150	2.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	240	0.5	2
<b>Engineers</b> .....	60	0.1	0
Computer.....	60	0.1	0
<b>Technicians</b> .....	810	1.6	2
Computer programmer.....	810	1.6	2
<b>Insurance carriers, n.e.c. (SIC 6390)</b>			
<b>Scientific and technical personnel</b> .....	100	2.4	17
<b>Scientists</b> .....	100	2.4	17
Computer analysts.....	100	2.4	17

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Insurance agents, brokers and service (SIC 6410)</b>			
<b>Scientific and technical personnel</b> .....	21,050	2.8	(nc)
<b>Scientists</b> .....	9,260	1.2	(nc)
Operations and systems researchers and analysts.....	230	<	5
Statisticians.....	160	<	3
All other mathematicians.....	1,330	0.2	(nc)
Social scientists.....	70	<	(nc)
All other social scientists.....	70	<	(nc)
Computer analysts.....	7,470	1	(nc)
<b>Managers of scientific and technical personnel</b> .....	1,520	0.2	4
<b>Engineers</b> .....	4,400	0.6	(nc)
Civil.....	40	<	6
Computer.....	930	0.1	4
Industrial.....	40	<	10
Other, n.e.c.....	3,390	0.5	(nc)
<b>Technicians</b> .....	5,870	0.8	(nc)
Computer programmer.....	5,550	0.7	6
All other engineering technicians.....	230	<	(nc)
Mathematical technicians.....	90	<	19
<b>Real estate operators and lessors (SIC 6510)</b>			
<b>Scientific and technical personnel</b> .....	1,660	0.3	(nc)
<b>Scientists</b> .....	150	<	(nc)
Social scientists.....	40	<	(nc)
All other social scientists.....	40	<	(nc)
Computer analysts.....	110	<	11
<b>Managers of scientific and technical personnel</b> .....	240	<	10
<b>Engineers</b> .....	730	0.1	(nc)
Civil.....	80	<	14
Mechanical.....	270	0.1	21
Other, n.e.c.....	380	0.1	(nc)
<b>Technicians</b> .....	540	0.1	(nc)
Computer programmer.....	160	<	29
Drafter.....	190	<	18
All other engineering technicians.....	190	<	(nc)

See explanatory information and SOURCE at end of table.

## [Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Real estate agents and managers (SIC 6530)</b>			
<b>Scientific and technical personnel</b> .....	4,080	0.6	(nc)
<b>Scientists</b> .....	1,020	0.1	(nc)
Operations and systems researchers and analysts.....	140	<	24
Social scientists.....	210	<	(nc)
All other social scientists.....	210	<	(nc)
Computer analysts.....	670	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	450	0.1	4
<b>Engineers</b> .....	1,800	0.2	(nc)
Civil.....	90	<	34
Computer.....	130	<	5
Mechanical.....	520	0.1	10
Other, n.e.c.....	1,060	0.1	(nc)
<b>Technicians</b> .....	810	0.1	(nc)
Computer programmer.....	390	0.1	7
Drafter.....	210	<	15
All other engineering technicians.....	210	<	(nc)
<b>Title abstract offices (SIC 6540)</b>			
<b>Scientific and technical personnel</b> .....	160	0.4	(nc)
<b>Scientists</b> .....	100	0.2	(nc)
Computer analysts.....	100	0.2	(nc)
<b>Technicians</b> .....	60	0.2	48
Surveyor.....	60	0.2	48
<b>Subdividers and developers (SIC 6550)</b>			
<b>Scientific and technical personnel</b> .....	1,040	0.9	(nc)
<b>Scientists</b> .....	110	0.1	(nc)
Computer analysts.....	110	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	140	0.1	8
<b>Engineers</b> .....	360	0.3	(nc)
Civil.....	170	0.1	32
Computer.....	40	<	35
Mechanical.....	150	0.1	2

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Subdividers and developers (SIC 6550) -- continued:</b>			
<b>Technicians.....</b>	430	0.4	(nc)
Computer programmer.....	80	0.1	16
Drafter.....	190	0.2	21
Surveyor.....	160	0.1	(nc)
<b>Holding offices (SIC 6710)</b>			
<b>Scientific and technical personnel.....</b>	11,760	11.1	(nc)
<b>Scientists.....</b>	5,190	4.9	(nc)
Operations and systems researchers and analysts.....	160	0.2	4
All other mathematicians.....	100	0.1	(nc)
Physical scientists.....	370	0.4	(nc)
All other physical scientists.....	370	0.4	(nc)
Social scientists.....	440	0.4	5
Economists.....	440	0.4	5
Computer analysts.....	4,120	3.9	(nc)
<b>Managers of scientific and technical personnel.....</b>	2,230	2.1	5
<b>Engineers.....</b>	1,620	1.5	(nc)
Computer.....	600	0.6	3
Electrical/electronics.....	80	0.1	2
Industrial.....	260	0.3	11
Other, n.e.c.....	680	0.6	(nc)
<b>Technicians.....</b>	2,720	2.6	(nc)
Computer programmer.....	1,690	1.6	6
Drafter.....	150	0.1	6
All other engineering technicians.....	340	0.3	8
Physical and life science technicians.....	540	0.5	(nc)
All other physical and life science technicians.....	540	0.5	(nc)
<b>Investment offices (SIC 6720)</b>			
<b>Scientific and technical personnel.....</b>	1,190	4.5	(nc)
<b>Scientists.....</b>	800	3	(nc)
Operations and systems researchers and analysts.....	150	0.6	0
Social scientists.....	140	0.5	1
Economists.....	140	0.5	1
Computer analysts.....	510	1.9	(nc)
<b>Managers of scientific and technical personnel.....</b>	90	0.3	0

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Investment offices (SIC 6720) -- continued:</b>			
Engineers.....	210	0.8	(nc)
Computer.....	110	0.4	0
Industrial.....	100	0.4	4
Technicians.....	90	0.3	4
Computer programmer.....	90	0.3	4
<b>Trusts (SIC 6730)</b>			
Scientific and technical personnel.....	1,950	4.1	(nc)
Scientists.....	860	1.8	(nc)
Operations and systems researchers and analysts.....	40	0.1	5
All other mathematicians.....	70	0.2	(nc)
Life scientists.....	190	0.4	(nc)
All other life scientists.....	190	0.4	(nc)
Social scientists.....	230	0.5	(nc)
Economists.....	110	0.2	14
All other social scientists.....	120	0.3	(nc)
Computer analysts.....	330	0.7	6
Managers of scientific and technical personnel.....	80	0.2	8
Engineers.....	160	0.3	(nc)
Computer.....	50	0.1	15
Industrial.....	110	0.2	0
Technicians.....	850	1.8	(nc)
Computer programmer.....	180	0.4	7
Physical and life science technicians.....	670	1.4	(nc)
All other physical and life science technicians.....	670	1.4	(nc)
<b>Misc. investing (SIC 6790)</b>			
Scientific and technical personnel.....	1,710	3.4	(nc)
Scientists.....	710	1.4	(nc)
Operations and systems researchers and analysts.....	150	0.3	1
Physical scientists.....	60	0.1	(nc)
All other physical scientists.....	60	0.1	(nc)
Social scientists.....	110	0.2	13
Economists.....	110	0.2	13
Computer analysts.....	390	0.8	(nc)
Managers of scientific and technical personnel.....	210	0.4	8

See explanatory information and SOURCE at end of table.

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. investing (SIC 6790) -- continued:</b>			
Engineers.....	360	0.7	(nc)
Other, n.e.c.....	360	0.7	(nc)
Technicians.....			
Computer programmer.....	430	0.9	(nc)
Drafter.....	250	0.5	4
All other engineering technicians.....	50	0.1	8
	130	0.3	(nc)

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey

**Table A-5.6. Employed scientists, engineers, technicians (SETs), and SET managers,  
in SICs 70-89 (services), and the relative standard error: 1998**

[Filled positions]

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Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Hotels and motels (SIC 7010)</b>			
<b>Scientific and technical personnel</b> .....	8,830	0.5	(nc)
<b>Scientists</b> .....	590	<	(nc)
All other mathematicians.....	10	<	(nc)
Computer analysts.....	580	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	120	<	6
<b>Engineers</b> .....	6,240	0.4	(nc)
Computer.....	90	<	3
Electrical/electronics.....	810	0.1	1
Mechanical.....	1,930	0.1	3
Other, n.e.c.....	3,410	0.2	(nc)
<b>Technicians</b> .....	1,880	0.1	(nc)
Computer programmer.....	370	<	1
Electrical/electronics engineering technician.....	1,000	0.1	<
All other engineering technicians.....	510	<	(nc)
<b>Laundry, cleaning, and garment services (SIC 7210)</b>			
<b>Scientific and technical personnel</b> .....	820	0.2	(nc)
<b>Scientists</b> .....	90	<	(nc)
Computer analysts.....	90	<	(nc)
<b>Engineers</b> .....	420	0.1	(nc)
Other, n.e.c.....	420	0.1	(nc)
<b>Technicians</b> .....	310	0.1	(nc)
Computer programmer.....	130	<	9
All other engineering technicians.....	180	<	(nc)
<b>Photographic studios, portrait (SIC 7220)</b>			
<b>Scientific and technical personnel</b> .....	110	0.2	(nc)
<b>Scientists</b> .....	60	0.1	(nc)
Computer analysts.....	60	0.1	(nc)
<b>Technicians</b> .....	50	0.1	(nc)
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. personal services (SIC 7290)</b>			
<b>Scientific and technical personnel</b> .....	290	0.2	(nc)
<b>Scientists</b> .....	200	0.1	2
Computer analysts.....	200	0.1	2
<b>Technicians</b> .....	90	0.1	21
Computer programmer.....	90	0.1	21
<b>Advertising (SIC 7310)</b>			
<b>Scientific and technical personnel</b> .....	6,580	2.4	(nc)
<b>Scientists</b> .....	3,140	1.2	(nc)
Operations and systems researchers and analysts.....	140	0.1	8
Social scientists.....	570	0.2	13
Economists.....	570	0.2	13
Computer analysts.....	2,430	0.9	(nc)
<b>Managers of scientific and technical personnel</b> .....	730	0.3	8
<b>Engineers</b> .....	1,000	0.4	(nc)
Computer.....	210	0.1	22
Electrical/electronics.....	90	<	21
Sales.....	40	<	7
Other, n.e.c.....	660	0.3	(nc)
<b>Technicians</b> .....	1,710	0.6	(nc)
Computer programmer.....	1,340	0.5	12
Drafter.....	40	<	35
All other engineering technicians.....	330	0.1	(nc)
<b>Credit reporting and collection (SIC 7320)</b>			
<b>Scientific and technical personnel</b> .....	1,590	1.1	(nc)
<b>Scientists</b> .....	540	0.4	(nc)
Operations and systems researchers and analysts.....	90	0.1	8
All other mathematicians.....	50	<	0
Social scientists.....	30	<	(nc)
All other social scientists.....	30	<	(nc)
Computer analysts.....	370	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	170	0.1	5
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Credit reporting and collection (SIC 7320) -- continued:</b>			
Engineers.....	130	0.1	27
Computer.....	130	0.1	27
Technicians.....	750	0.5	(nc)
Computer programmer.....	700	0.5	4
All other engineering technicians.....	50	<	(nc)
<b>Mailing, reproduction, and stenographic (SIC 7330)</b>			
Scientific and technical personnel.....	8,150	2.5	(nc)
Scientists.....	1,190	0.4	(nc)
Operations and systems researchers and analysts.....	60	<	3
All other mathematicians.....	80	<	(nc)
Social scientists.....	100	<	4
Economists.....	100	<	4
Computer analysts.....	950	0.3	(nc)
Managers of scientific and technical personnel.....	550	0.2	6
Engineers.....	570	0.2	(nc)
Computer.....	270	0.1	4
Electrical/electronics.....	80	<	2
Industrial.....	30	<	13
Mechanical.....	60	<	2
Sales.....	40	<	0
Other, n.e.c.....	90	<	(nc)
Technicians.....	5,840	1.8	(nc)
Computer programmer.....	3,570	1.1	11
Drafter.....	1,210	0.4	17
Electrical/electronics engineering technician.....	290	0.1	30
Mechanical engineering technicians.....	410	0.1	9
All other engineering technicians.....	360	0.1	(nc)
<b>Services to buildings (SIC 7340)</b>			
Scientific and technical personnel.....	900	0.1	(nc)
Scientists.....	170	<	(nc)
Physical scientists.....	110	<	(nc)
All other physical scientists.....	110	<	(nc)
Computer analysts.....	60	<	35
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Services to buildings (SIC 7340) -- continued:</b>			
Engineers.....	420	<	(nc)
Mechanical.....	100	<	25
Other, n.e.c.....	320	<	(nc)
Technicians.....	310	<	(nc)
Computer programmer.....	60	<	12
All other engineering technicians.....	250	<	(nc)
<b>Misc. equipment rental and leasing (SIC 7350)</b>			
Scientific and technical personnel.....	2,660	1	(nc)
Scientists.....	270	0.1	(nc)
Computer analysts.....	270	0.1	(nc)
Managers of scientific and technical personnel.....	100	<	6
Engineers.....	780	0.3	(nc)
Computer.....	90	<	13
Electrical/electronics.....	120	0.1	25
Mechanical.....	240	0.1	16
Sales.....	170	0.1	44
Other, n.e.c.....	160	0.1	(nc)
Technicians.....	1,510	0.6	(nc)
Computer programmer.....	320	0.1	5
Drafter.....	120	0.1	9
Electrical/electronics engineering technician.....	510	0.2	10
All other engineering technicians.....	560	0.2	(nc)
<b>Personnel supply services (SIC 7360)</b>			
Scientific and technical personnel.....	145,480	4.3	(nc)
Scientists.....	21,360	0.6	(nc)
Operations and systems researchers and analysts.....	1,560	0.1	10
All other mathematicians.....	80	<	(nc)
Physical scientists.....	3,340	0.1	(nc)
Chemists.....	2,000	0.1	5
Geologists, geophysicists, and earth scientists.....	280	<	21
All other physical scientists.....	1,060	<	(nc)
Life scientists.....	360	<	(nc)
All other life scientists.....	360	<	(nc)
Social scientists.....	860	<	(nc)
All other social scientists.....	860	<	(nc)
Computer analysts.....	15,160	0.5	(nc)
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Personnel supply services (SIC 7360) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	1,410	<	7
<b>Engineers</b> .....	38,360	1.1	(nc)
Aeronautical.....	6,190	0.2	7
Computer.....	7,440	0.2	10
Electrical/electronics.....	5,800	0.2	41
Industrial.....	1,720	0.1	13
Mechanical.....	4,700	0.1	7
Sales.....	570	<	2
Other, n.e.c. ....	11,940	0.4	(nc)
<b>Technicians</b> .....	84,350	2.5	(nc)
Computer programmer.....	20,360	0.6	6
Drafter.....	18,880	0.6	11
Surveyor.....	630	<	15
Electrical/electronics engineering technician.....	13,030	0.4	4
Mechanical engineering technicians.....	3,560	0.1	1
All other engineering technicians.....	20,600	0.6	(nc)
Physical and life science technicians.....	7,290	0.2	(nc)
All other physical and life science technicians.....	7,290	0.2	(nc)
<b>Computer and data processing services (SIC 7370)</b>			
<b>Scientific and technical personnel</b> .....	699,330	42.1	(nc)
<b>Scientists</b> .....	199,710	12	(nc)
Operations and systems researchers and analysts.....	15,130	0.9	5
Statisticians.....	180	<	1
All other mathematicians.....	440	<	7
Physical scientists.....	960	0.1	(nc)
Geologists, geophysicists, and earth scientists.....	110	<	47
Atmospheric and space scientists.....	300	<	11
All other physical scientists.....	550	<	(nc)
Social scientists.....	4,670	0.3	(nc)
Economists.....	4,040	0.2	26
All other social scientists.....	630	<	(nc)
Computer analysts.....	178,330	10.7	(nc)
<b>Managers of scientific and technical personnel</b> .....	38,570	2.3	2
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Computer and data processing services (SIC 7370) -- continued:</b>			
<b>Engineers.....</b>	182,140	10.9	(nc)
Aeronautical.....	320	<	29
Chemical.....	160	<	44
Computer.....	133,150	8	2
Electrical/electronics.....	18,640	1.1	7
Industrial.....	3,930	0.2	7
Mechanical.....	1,830	0.1	6
Sales.....	5,680	0.3	9
Other, n.e.c.....	18,430	1.1	(nc)
<b>Technicians.....</b>	278,910	16.8	(nc)
Computer programmer.....	245,790	14.7	2
Drafter.....	2,250	0.1	12
Surveyor.....	610	<	30
Electrical/electronics engineering technician.....	19,940	1.2	3
Mechanical engineering technicians.....	640	<	14
All other engineering technicians.....	9,250	0.6	(nc)
Physical and life science technicians.....	430	<	(nc)
All other physical and life science technicians.....	430	<	(nc)
<b>Misc. business services (SIC 7380)</b>			
<b>Scientific and technical personnel.....</b>	50,070	2.7	(nc)
<b>Scientists.....</b>	8,030	0.5	(nc)
Operations and systems researchers and analysts.....	880	0.1	28
Statisticians.....	150	<	36
Physical scientists.....	880	0.1	(nc)
Chemists.....	360	<	33
All other physical scientists.....	520	<	(nc)
Social scientists.....	530	<	12
Economists.....	530	<	12
Computer analysts.....	5,590	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,840	0.1	11
<b>Engineers.....</b>	9,420	0.5	(nc)
Computer.....	2,070	0.1	44
Electrical/electronics.....	1,000	0.1	23
Industrial.....	320	<	20
Mechanical.....	1,760	0.1	30
Sales.....	820	<	25
Other, n.e.c.....	3,450	0.2	(nc)
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. business services (SIC 7380) -- continued:</b>			
<b>Technicians.....</b>	30,780	1.7	(nc)
Computer programmer.....	10,980	0.6	15
Drafter.....	13,240	0.7	24
Surveyor.....	1,690	0.1	(nc)
Electrical/electronics engineering technician.....	2,210	0.1	18
Mechanical engineering technicians.....	520	<	11
All other engineering technicians.....	1,560	0.1	(nc)
Physical and life science technicians.....	580	<	(nc)
Chemical technicians, except health.....	100	<	48
All other physical and life science technicians.....	480	<	(nc)
<b>Automobile rentals, no drivers (SIC 7510)</b>			
<b>Scientific and technical personnel.....</b>	1,790	0.9	(nc)
<b>Scientists.....</b>	350	0.2	(nc)
Computer analysts.....	350	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	120	0.1	1
<b>Engineers.....</b>	50	<	(nc)
Other, n.e.c.....	50	<	(nc)
<b>Technicians.....</b>	1,270	0.6	1
Computer programmer.....	1,270	0.6	1
<b>Automobile parking (SIC 7520)</b>			
<b>Scientific and technical personnel.....</b>	30	<	(nc)
<b>Scientists.....</b>	30	<	(nc)
Computer analysts.....	30	<	(nc)
<b>Automobile repair shops (SIC 7530)</b>			
<b>Scientific and technical personnel.....</b>	310	0.1	(nc)
<b>Scientists.....</b>	40	<	24
Computer analysts.....	40	<	24
<b>Managers of scientific and technical personnel.....</b>	40	<	8
<b>Engineers.....</b>	60	<	(nc)
Other, n.e.c.....	60	<	(nc)
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Automobile repair shops (SIC 7530) -- continued:</b>			
<b>Technicians.....</b>	170	<	(nc)
Computer programmer.....	50	<	39
All other engineering technicians.....	120	<	(nc)
<b>Automobile services, except repair (SIC 7540)</b>			
<b>Scientific and technical personnel.....</b>	330	0.1	(nc)
<b>Scientists.....</b>	70	<	(nc)
Computer analysts.....	70	<	(nc)
<b>Engineers.....</b>	40	<	(nc)
Other, n.e.c.....	40	<	(nc)
<b>Technicians.....</b>	220	0.1	(nc)
All other engineering technicians.....	220	0.1	(nc)
<b>Electrical repair shops (SIC 7620)</b>			
<b>Scientific and technical personnel.....</b>	2,930	2.6	(nc)
<b>Scientists.....</b>	150	0.1	(nc)
Computer analysts.....	150	0.1	(nc)
<b>Managers of scientific and technical personnel.....</b>	130	0.1	12
<b>Engineers.....</b>	980	0.9	(nc)
Computer.....	50	<	41
Electrical/electronics.....	230	0.2	19
Mechanical.....	30	<	28
Sales.....	30	<	7
Other, n.e.c.....	640	0.6	(nc)
<b>Technicians.....</b>	1,670	1.5	(nc)
Computer programmer.....	170	0.2	12
Drafter.....	60	0.1	14
Electrical/electronics engineering technician.....	610	0.5	26
All other engineering technicians.....	830	0.7	(nc)
<b>Misc. repair shops (SIC 7690)</b>			
<b>Scientific and technical personnel.....</b>	2,510	1.1	(nc)
<b>Scientists.....</b>	30	<	18
Computer analysts.....	30	<	18
All other engineering technicians.....	50	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Misc. repair shops (SIC 7690) -- continued:</b>			
<b>Managers of scientific and technical personnel</b> .....	160	0.1	6
<b>Engineers</b> .....	990	0.4	(nc)
Electrical/electronics.....	100	<	37
Industrial.....	90	<	38
Other, n.e.c.....	800	0.3	(nc)
<b>Technicians</b> .....	1,330	0.6	(nc)
Computer programmer.....	90	<	8
Drafter.....	220	0.1	7
Electrical/electronics engineering technician.....	230	0.1	25
All other engineering technicians.....	590	0.3	(nc)
Physical and life science technicians.....	200	0.1	(nc)
All other physical and life science technicians.....	200	0.1	(nc)
<b>Motion picture production and services (SIC 7810)</b>			
<b>Scientific and technical personnel</b> .....	10,020	3.9	(nc)
<b>Scientists</b> .....	590	0.2	(nc)
Life scientists.....	70	<	(nc)
All other life scientists.....	70	<	(nc)
Computer analysts.....	520	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	110	<	32
<b>Engineers</b> .....	1,490	0.6	(nc)
Electrical/electronics.....	680	0.3	23
Other, n.e.c.....	810	0.3	(nc)
<b>Technicians</b> .....	7,830	3	(nc)
Computer programmer.....	1,670	0.7	10
Electrical/electronics engineering technician.....	870	0.3	14
All other engineering technicians.....	5,290	2.1	(nc)
<b>Motion picture distribution and services (SIC 7820)</b>			
<b>Scientific and technical personnel</b> .....	1,280	7.4	(nc)
<b>Scientists</b> .....	190	1.1	(nc)
Computer analysts.....	190	1.1	(nc)
<b>Technicians</b> .....	1,090	6.3	(nc)
Computer programmer.....	310	1.8	4
All other engineering technicians.....	780	4.5	15

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Motion picture theaters (SIC 7830)</b>			
<b>Scientific and technical personnel</b> .....	200	0.2	(nc)
<b>Scientists</b> .....	160	0.1	(nc)
Computer analysts.....	160	0.1	(nc)
<b>Technicians</b> .....	40	<	12
All other engineering technicians.....	40	<	12
<b>Video tape rental (SIC 7840)</b>			
<b>Scientific and technical personnel</b> .....	160	0.1	(nc)
<b>Scientists</b> .....	50	<	12
Social scientists.....	50	<	12
Economists.....	50	<	12
<b>Managers of scientific and technical personnel</b> .....	110	0.1	12
<b>Producers, orchestras, and entertainers (SIC 7920)</b>			
<b>Scientific and technical personnel</b> .....	1,580	0.9	(nc)
<b>Scientists</b> .....	130	0.1	(nc)
Computer analysts.....	130	0.1	(nc)
<b>Engineers</b> .....	130	0.1	(nc)
Electrical/electronics.....	100	0.1	17
Other, n.e.c.....	30	<	19
<b>Technicians</b> .....	1,320	0.8	(nc)
Computer programmer.....	250	0.1	24
Electrical/electronics engineering technician.....	280	0.2	5
All other engineering technicians.....	790	0.5	(nc)
<b>Commercial sports (SIC 7940)</b>			
<b>Scientific and technical personnel</b> .....	1,110	0.9	(nc)
<b>Scientists</b> .....	150	0.1	(nc)
Computer analysts.....	150	0.1	(nc)
<b>Engineers</b> .....	170	0.1	(nc)
Electrical/electronics.....	70	0.1	13
Other, n.e.c.....	100	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Commercial sports (SIC 7940) -- continued:</b>			
<b>Technicians.....</b>	790	0.7	(nc)
Computer programmer.....	70	0.1	3
Electrical/electronics engineering technician.....	60	0.1	0
All other engineering technicians.....	660	0.6	(nc)
<b>Misc. amusement, recreation services (SIC 7990)</b>			
<b>Scientific and technical personnel.....</b>	4,520	0.4	(nc)
<b>Scientists.....</b>	260	<	2
Computer analysts.....	260	<	2
<b>Engineers.....</b>	1,870	0.2	(nc)
Electrical/electronics.....	170	<	4
Other, n.e.c.....	1,700	0.1	(nc)
<b>Technicians.....</b>	2,390	0.2	(nc)
Computer programmer.....	360	<	3
Electrical/electronics engineering technician.....	1,170	0.1	2
All other engineering technicians.....	760	0.1	(nc)
Physical and life science technicians.....	100	<	(nc)
All other physical and life science technicians.....	100	<	(nc)
<b>Offices and clinics of medical doctors (SIC 8010)</b>			
<b>Scientific and technical personnel.....</b>	9,890	0.5	(nc)
<b>Scientists.....</b>	6,860	0.4	(nc)
Life scientists.....	740	<	(nc)
Biological scientists.....	310	<	10
Medical scientists.....	430	<	18
Social scientists.....	3,370	0.2	12
Psychologists.....	3,370	0.2	12
Computer analysts.....	2,750	0.2	(nc)
<b>Managers of scientific and technical personnel.....</b>	920	0.1	4
<b>Engineers.....</b>	700	<	(nc)
Computer.....	200	<	4
Other, n.e.c.....	500	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Offices and clinics of medical doctors (SIC 8010) -- continued:</b>			
<b>Technicians.....</b>	1,410	0.1	(nc)
Computer programmer.....	810	<	3
Physical and life science technicians.....	600	<	(nc)
Biological science technician.....	200	<	8
Chemical technicians, except health.....	140	<	8
All other physical and life science technicians.....	260	<	(nc)
<b>Offices and clinics of dentists (SIC 8020)</b>			
<b>Scientific and technical personnel.....</b>	120	<	(nc)
<b>Scientists.....</b>	10	<	(nc)
Social scientists.....	10	<	(nc)
All other social scientists.....	10	<	(nc)
<b>Managers of scientific and technical personnel.....</b>	110	<	38
<b>Offices of osteopathic physicians (SIC 8030)</b>			
<b>Scientific and technical personnel.....</b>	30	0.1	18
<b>Scientists.....</b>	30	0.1	18
Social scientists.....	30	0.1	18
Psychologists.....	30	0.1	18
<b>Offices of other health practitioners (SIC 8040)</b>			
<b>Scientific and technical personnel.....</b>	9,820	2.2	(nc)
<b>Scientists.....</b>	9,680	2.1	(nc)
All other mathematicians.....	160	<	(nc)
Life scientists.....	60	<	(nc)
All other life scientists.....	60	<	(nc)
Social scientists.....	9,230	2	11
Psychologists.....	9,230	2	11
Computer analysts.....	230	0.1	3
<b>Managers of scientific and technical personnel.....</b>	70	<	9
<b>Technicians.....</b>	70	<	16
Computer programmer.....	70	<	16

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Nursing and personal care facilities (SIC 8050)</b>			
<b>Scientific and technical personnel</b> .....	1,400	0.1	(nc)
<b>Scientists</b> .....	790	<	(nc)
Social scientists.....	630	<	(nc)
Psychologists.....	410	<	7
All other social scientists.....	220	<	17
Computer analysts.....	160	<	12
<b>Managers of scientific and technical personnel</b> .....	380	<	13
<b>Engineers</b> .....	140	<	31
Mechanical.....	140	<	31
<b>Technicians</b> .....	90	<	23
Computer programmer.....	90	<	23
<b>Hospitals (SIC 8060)</b>			
<b>Scientific and technical personnel</b> .....	66,490	1.4	(nc)
<b>Scientists</b> .....	40,980	0.9	(nc)
All other mathematicians.....	2,000	<	(nc)
Physical scientists.....	850	<	(nc)
All other physical scientists.....	850	<	(nc)
Life scientists.....	8,530	0.2	(nc)
Biological scientists.....	3,510	0.1	1
Medical scientists.....	4,420	0.1	<
All other life scientists.....	600	<	(nc)
Social scientists.....	12,410	0.3	(nc)
Psychologists.....	10,080	0.2	<
All other social scientists.....	2,330	0.1	(nc)
Computer analysts.....	17,190	0.4	(nc)
<b>Managers of scientific and technical personnel</b> .....	6,420	0.1	<
<b>Engineers</b> .....	6,390	0.1	(nc)
Computer.....	1,700	<	<
Electrical/electronics.....	330	<	<
Industrial.....	410	<	1
Mechanical.....	1,510	<	3
Other, n.e.c.....	2,440	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Hospitals (SIC 8060) -- continued:</b>			
<b>Technicians.....</b>	12,700	0.3	(nc)
Computer programmer.....	6,130	0.1	<
Electrical/electronics engineering technician.....	1,020	<	<
Mechanical engineering technicians.....	350	<	0
Civil engineering technician.....	430	<	0
All other engineering technicians.....	1,370	<	(nc)
Physical and life science technicians.....	3,400	0.1	(nc)
Biological science technician.....	890	<	0
Chemical technicians, except health.....	700	<	0
All other physical and life science technicians.....	1,810	<	(nc)
<b>Medical and dental laboratories (SIC 8070)</b>			
<b>Scientific and technical personnel.....</b>	5,490	2.7	(nc)
<b>Scientists.....</b>	3,220	1.6	(nc)
Physical scientists.....	240	0.1	(nc)
All other physical scientists.....	240	0.1	(nc)
Life scientists.....	2,280	1.1	(nc)
Biological scientists.....	1,420	0.7	6
Medical scientists.....	780	0.4	6
All other life scientists.....	80	<	(nc)
Computer analysts.....	700	0.3	(nc)
<b>Managers of scientific and technical personnel.....</b>	560	0.3	5
<b>Engineers.....</b>	400	0.2	(nc)
Computer.....	150	0.1	40
Electrical/electronics.....	50	<	15
Other, n.e.c.....	200	0.1	(nc)
<b>Technicians.....</b>	1,310	0.6	(nc)
Computer programmer.....	290	0.1	5
Electrical/electronics engineering technician.....	200	0.1	10
All other engineering technicians.....	90	<	(nc)
Physical and life science technicians.....	730	0.4	(nc)
Biological science technician.....	310	0.2	17
Chemical technicians, except health.....	180	0.1	11
All other physical and life science technicians.....	240	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Home health care services (SIC 8080)</b>			
<b>Scientific and technical personnel</b> .....	710	0.1	(nc)
<b>Scientists</b> .....	400	0.1	(nc)
Social scientists.....	90	<	(nc)
Psychologists.....	50	<	19
All other social scientists.....	40	<	22
Computer analysts.....	310	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	190	<	7
<b>Technicians</b> .....	120	<	6
Computer programmer.....	120	<	6
<b>Health and allied services, n.e.c. (SIC 8090)</b>			
<b>Scientific and technical personnel</b> .....	7,780	2.3	(nc)
<b>Scientists</b> .....	6,160	1.8	(nc)
Life scientists.....	150	<	(nc)
Biological scientists.....	40	<	16
Medical scientists.....	110	<	0
Social scientists.....	5,460	1.6	(nc)
Psychologists.....	4,890	1.4	7
All other social scientists.....	570	0.2	6
Computer analysts.....	550	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	480	0.1	18
<b>Engineers</b> .....	150	0.1	(nc)
Computer.....	60	<	6
Other, n.e.c. ....	90	<	(nc)
<b>Technicians</b> .....	990	0.3	(nc)
Computer programmer.....	410	0.1	18
All other engineering technicians.....	130	<	(nc)
Physical and life science technicians.....	450	0.1	(nc)
Biological science technician.....	100	<	5
All other physical and life science technicians.....	350	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Legal services (SIC 8110)</b>			
<b>Scientific and technical personnel</b> .....	2,310	0.2	(nc)
<b>Scientists</b> .....	1,330	0.1	(nc)
Operations and systems researchers and analysts.....	90	<	0
All other mathematicians.....	90	<	(nc)
Social scientists.....	170	<	(nc)
All other social scientists.....	170	<	(nc)
Computer analysts.....	980	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	260	<	8
<b>Engineers</b> .....	200	<	14
Computer.....	200	<	14
<b>Technicians</b> .....	520	0.1	11
Computer programmer.....	520	0.1	11
<b>Elementary and secondary schools (SIC 8210)</b>			
<b>Scientific and technical personnel</b> .....	34,840	0.5	(nc)
<b>Scientists</b> .....	31,510	0.4	(nc)
Social scientists.....	29,550	0.4	(nc)
Psychologists.....	28,970	0.4	1
All other social scientists.....	580	<	(nc)
Computer analysts.....	1,960	<	6
<b>Managers of scientific and technical personnel</b> .....	690	<	6
<b>Engineers</b> .....	990	<	(nc)
Other, n.e.c.....	990	<	(nc)
<b>Technicians</b> .....	1,650	<	4
Computer programmer.....	1,650	<	4

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Colleges, universities, and professional (SIC 8220)</b>			
Scientific and technical personnel.....	60,150	2.1	(nc)
<b>Scientists.....</b>	35,530	1.3	(nc)
Operations and systems researchers and analysts.....	530	<	0
Statisticians.....	350	<	0
All other mathematicians.....	2,180	0.1	1
Physical scientists.....	630	<	(nc)
Geologists, geophysicists, and earth scientists.....	240	<	0
All other physical scientists.....	390	<	(nc)
Life scientists.....	1,980	0.1	(nc)
Biological scientists.....	880	<	3
Medical scientists.....	1,100	<	4
Social scientists.....	9,950	0.4	(nc)
Psychologists.....	3,000	0.1	1
Urban and regional planners.....	420	<	<
All other social scientists.....	6,530	0.2	(nc)
Computer analysts.....	19,910	0.7	(nc)
<b>Managers of scientific and technical personnel.....</b>	6,070	0.2	1
<b>Engineers.....</b>	1,100	<	(nc)
Computer.....	230	<	8
Other, n.e.c.....	870	<	(nc)
<b>Technicians.....</b>	17,450	0.6	(nc)
Computer programmer.....	13,300	0.5	<
Drafter.....	160	<	0
Electrical/electronics engineering technician.....	490	<	1
Civil engineering technician.....	270	<	9
All other engineering technicians.....	1,000	<	(nc)
Physical and life science technicians.....	1,640	0.1	(nc)
Biological science technician.....	450	<	3
All other physical and life science technicians.....	1,190	<	(nc)
Mathematical technicians.....	590	<	0
<b>Libraries (SIC 8230)</b>			
<b>Scientific and technical personnel.....</b>	80	0.3	(nc)
<b>Scientists.....</b>	80	0.3	(nc)
Computer analysts.....	80	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Vocational schools (SIC 8240)</b>			
<b>Scientific and technical personnel</b> .....	1,770	1.5	(nc)
<b>Scientists</b> .....	480	0.4	(nc)
Social scientists.....	120	0.1	(nc)
All other social scientists.....	120	0.1	(nc)
Computer analysts.....	360	0.3	32
<b>Managers of scientific and technical personnel</b> .....	200	0.2	29
<b>Engineers</b> .....	470	0.4	(nc)
Other, n.e.c. ....	470	0.4	(nc)
<b>Technicians</b> .....	620	0.5	(nc)
Computer programmer.....	550	0.5	9
All other engineering technicians.....	30	<	(nc)
Physical and life science technicians.....	40	<	(nc)
All other physical and life science technicians.....	40	<	(nc)
<b>Schools and educational services, n.e.c. (SIC 8290)</b>			
<b>Scientific and technical personnel</b> .....	2,030	1.1	(nc)
<b>Scientists</b> .....	950	0.5	(nc)
Operations and systems researchers and analysts.....	50	<	0
Physical scientists.....	70	<	(nc)
All other physical scientists.....	70	<	(nc)
Social scientists.....	240	0.1	(nc)
Psychologists.....	150	0.1	9
All other social scientists.....	90	0.1	(nc)
Computer analysts.....	590	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	260	0.1	31
<b>Engineers</b> .....	270	0.1	(nc)
Computer.....	40	<	22
Other, n.e.c. ....	230	0.1	(nc)
<b>Technicians</b> .....	550	0.3	(nc)
Computer programmer.....	360	0.2	10
Mechanical engineering technicians.....	50	<	0
All other engineering technicians.....	70	<	(nc)
Physical and life science technicians.....	70	<	(nc)
All other physical and life science technicians.....	70	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Individual and family services (SIC 8320)</b>			
<b>Scientific and technical personnel</b> .....	5,700	0.8	(nc)
<b>Scientists</b> .....	5,170	0.7	(nc)
Statisticians.....	60	<	9
Social scientists.....	4,710	0.6	(nc)
Economists.....	90	<	31
Psychologists.....	4,020	0.6	6
All other social scientists.....	600	0.1	(nc)
Computer analysts.....	400	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	150	<	8
<b>Technicians</b> .....	380	0.1	(nc)
Computer programmer.....	300	<	14
Physical and life science technicians.....	80	<	(nc)
All other physical and life science technicians.....	80	<	(nc)
<b>Job training and related services (SIC 8330)</b>			
<b>Scientific and technical personnel</b> .....	1,450	0.5	(nc)
<b>Scientists</b> .....	800	0.3	(nc)
Statisticians.....	40	<	23
Social scientists.....	520	0.2	(nc)
Psychologists.....	390	0.1	3
All other social scientists.....	130	0.1	(nc)
Computer analysts.....	240	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	70	<	6
<b>Engineers</b> .....	370	0.1	(nc)
Other, n.e.c. ....	370	0.1	(nc)
<b>Technicians</b> .....	210	0.1	(nc)
Computer programmer.....	120	<	5
All other engineering technicians.....	90	<	(nc)
<b>Child day care services (SIC 8350)</b>			
<b>Scientific and technical personnel</b> .....	210	<	13
<b>Scientists</b> .....	210	<	13
Social scientists.....	210	<	13
Psychologists.....	210	<	13

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Residential care (SIC 8360)</b>			
<b>Scientific and technical personnel</b> .....	3,590	0.5	(nc)
<b>Scientists</b> .....	3,220	0.4	(nc)
Social scientists.....	3,000	0.4	(nc)
Psychologists.....	2,080	0.3	5
All other social scientists.....	920	0.1	(nc)
Computer analysts.....	220	<	(nc)
<b>Managers of scientific and technical personnel</b> .....	150	<	5
<b>Technicians</b> .....	220	<	(nc)
Computer programmer.....	140	<	5
All other engineering technicians.....	80	<	(nc)
<b>Social services, n.e.c. (SIC 8390)</b>			
<b>Scientific and technical personnel</b> .....	2,080	1	(nc)
<b>Scientists</b> .....	1,540	0.7	(nc)
Statisticians.....	40	<	18
Life scientists.....	120	0.1	(nc)
Biological scientists.....	30	<	43
All other life scientists.....	90	<	(nc)
Social scientists.....	1,060	0.5	(nc)
Economists.....	190	0.1	8
Psychologists.....	290	0.1	19
All other social scientists.....	580	0.3	(nc)
Computer analysts.....	320	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	170	0.1	7
<b>Engineers</b> .....	70	<	(nc)
Other, n.e.c. ....	70	<	(nc)
<b>Technicians</b> .....	300	0.1	(nc)
Computer programmer.....	180	0.1	6
All other engineering technicians.....	120	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Museums and art galleries (SIC 8410)</b>			
<b>Scientific and technical personnel</b> .....	1,010	1.4	(nc)
<b>Scientists</b> .....	460	0.6	(nc)
Physical scientists.....	110	0.2	(nc)
All other physical scientists.....	110	0.2	(nc)
Life scientists.....	70	0.1	(nc)
All other life scientists.....	70	0.1	(nc)
Social scientists.....	80	0.1	(nc)
All other social scientists.....	80	0.1	(nc)
Computer analysts.....	200	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	160	0.2	4
<b>Engineers</b> .....	60	0.1	(nc)
Other, n.e.c. ....	60	0.1	(nc)
<b>Technicians</b> .....	330	0.5	(nc)
Computer programmer.....	60	0.1	6
All other engineering technicians.....	80	0.1	(nc)
Physical and life science technicians.....	190	0.3	(nc)
All other physical and life science technicians.....	190	0.3	(nc)
<b>Botanical and zoological gardens (SIC 8420)</b>			
<b>Scientific and technical personnel</b> .....	710	3.2	(nc)
<b>Scientists</b> .....	270	1.2	(nc)
Life scientists.....	210	0.9	(nc)
All other life scientists.....	210	0.9	(nc)
Computer analysts.....	60	0.3	(nc)
<b>Managers of scientific and technical personnel</b> .....	110	0.5	2
<b>Engineers</b> .....	40	0.2	(nc)
Other, n.e.c. ....	40	0.2	(nc)
<b>Technicians</b> .....	290	1.3	(nc)
All other engineering technicians.....	40	0.2	(nc)
Physical and life science technicians.....	250	1.1	(nc)
All other physical and life science technicians.....	250	1.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Business associations (SIC 8610)</b>			
<b>Scientific and technical personnel</b> .....	3,000	2.8	(nc)
<b>Scientists</b> .....	1,670	1.5	(nc)
Statisticians.....	360	0.3	8
All other mathematicians.....	130	0.1	(nc)
Physical scientists.....	60	0.1	(nc)
All other physical scientists.....	60	0.1	(nc)
Social scientists.....	460	0.4	(nc)
Economists.....	340	0.3	14
All other social scientists.....	120	0.1	(nc)
Computer analysts.....	660	0.6	(nc)
<b>Managers of scientific and technical personnel</b> .....	350	0.3	11
<b>Engineers</b> .....	360	0.3	(nc)
Other, n.e.c. ....	360	0.3	(nc)
<b>Technicians</b> .....	620	0.6	(nc)
Computer programmer.....	390	0.4	5
All other engineering technicians.....	170	0.2	(nc)
Physical and life science technicians.....	60	0.1	(nc)
Biological science technician.....	30	<	31
All other physical and life science technicians.....	30	<	(nc)
<b>Professional organizations (SIC 8620)</b>			
<b>Scientific and technical personnel</b> .....	1,900	3	(nc)
<b>Scientists</b> .....	1,310	2.1	(nc)
Statisticians.....	290	0.5	5
Physical scientists.....	60	0.1	(nc)
All other physical scientists.....	60	0.1	(nc)
Social scientists.....	390	0.6	(nc)
Economists.....	170	0.3	28
All other social scientists.....	220	0.4	(nc)
Computer analysts.....	570	0.9	(nc)
<b>Managers of scientific and technical personnel</b> .....	180	0.3	6
<b>Engineers</b> .....	80	0.1	(nc)
Other, n.e.c. ....	80	0.1	(nc)
<b>Technicians</b> .....	330	0.5	(nc)
Computer programmer.....	300	0.5	3
All other engineering technicians.....	30	0.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Labor organizations (SIC 8630)</b>			
<b>Scientific and technical personnel</b> .....	250	0.2	(nc)
<b>Scientists</b> .....	130	0.1	(nc)
Social scientists.....	60	<	(nc)
All other social scientists.....	60	<	(nc)
Computer analysts.....	70	0.1	5
<b>Technicians</b> .....	120	0.1	12
Computer programmer.....	120	0.1	12
<b>Civic and social associations (SIC 8640)</b>			
<b>Scientific and technical personnel</b> .....	2,590	0.5	(nc)
<b>Scientists</b> .....	1,170	0.2	(nc)
Statisticians.....	80	<	40
Physical scientists.....	70	<	(nc)
All other physical scientists.....	70	<	(nc)
Life scientists.....	350	0.1	(nc)
Biological scientists.....	90	<	5
Foresters and conservation scientists.....	40	<	6
All other life scientists.....	220	<	23
Social scientists.....	330	0.1	(nc)
Economists.....	80	<	26
Psychologists.....	90	<	4
Urban and regional planners.....	90	<	16
All other social scientists.....	70	<	6
Computer analysts.....	340	0.1	(nc)
<b>Managers of scientific and technical personnel</b> .....	250	0.1	4
<b>Engineers</b> .....	340	0.1	(nc)
Civil.....	40	<	24
Other, n.e.c.....	300	0.1	(nc)
<b>Technicians</b> .....	830	0.2	(nc)
Computer programmer.....	230	0.1	6
Drafter.....	160	<	2
All other engineering technicians.....	150	<	(nc)
Physical and life science technicians.....	290	0.1	(nc)
Biological science technician.....	80	<	13
All other physical and life science technicians.....	210	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Political organizations (SIC 8650)</b>			
<b>Scientific and technical personnel</b> .....	70	0.8	(nc)
<b>Scientists</b> .....	70	0.8	(nc)
Computer analysts.....	70	0.8	(nc)
<b>Religious organizations (SIC 8660)</b>			
<b>Scientific and technical personnel</b> .....	640	0.5	(nc)
<b>Scientists</b> .....	390	0.3	(nc)
Social scientists.....	110	0.1	(nc)
Psychologists.....	80	0.1	27
All other social scientists.....	30	<	(nc)
Computer analysts.....	280	0.2	(nc)
<b>Managers of scientific and technical personnel</b> .....	50	<	21
<b>Engineers</b> .....	50	<	(nc)
Other, n.e.c. ....	50	<	(nc)
<b>Technicians</b> .....	150	0.1	10
Computer programmer.....	150	0.1	10
<b>Membership organizations, n.e.c. (SIC 8690)</b>			
<b>Scientific and technical personnel</b> .....	1,040	1.4	(nc)
<b>Scientists</b> .....	780	1	(nc)
Life scientists.....	310	0.4	(nc)
Foresters and conservation scientists.....	40	0.1	20
All other life scientists.....	270	0.4	(nc)
Social scientists.....	40	0.1	(nc)
All other social scientists.....	40	0.1	(nc)
Computer analysts.....	430	0.6	(nc)
<b>Managers of scientific and technical personnel</b> .....	120	0.2	12
<b>Technicians</b> .....	140	0.2	(nc)
Physical and life science technicians.....	140	0.2	(nc)
All other physical and life science technicians.....	140	0.2	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Engineering and architectural services (SIC 8710)</b>			
<b>Scientific and technical personnel.....</b>	533,490	57.4	(nc)
<b>Scientists.....</b>	37,430	4	(nc)
Operations and systems researchers and analysts.....	2,140	0.2	7
All other mathematicians.....	2,460	0.3	(nc)
Physical scientists.....	13,960	1.5	(nc)
Chemists.....	1,900	0.2	10
Geologists, geophysicists, and earth scientists.....	7,470	0.8	12
Physicists and astronomers.....	240	<	17
All other physical scientists.....	4,350	0.5	(nc)
Life scientists.....	1,940	0.2	(nc)
Biological scientists.....	790	0.1	8
Foresters and conservation scientists.....	250	<	6
All other life scientists.....	900	0.1	(nc)
Social scientists.....	2,740	0.3	(nc)
Economists.....	460	0.1	21
Urban and regional planners.....	1,510	0.2	9
All other social scientists.....	770	0.1	(nc)
Computer analysts.....	14,190	1.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	30,090	3.2	2
<b>Engineers.....</b>	210,150	22.6	(nc)
Aeronautical.....	3,070	0.3	9
Agricultural.....	680	0.1	20
Chemical.....	4,820	0.5	6
Civil.....	79,180	8.5	1
Computer.....	11,800	1.3	3
Electrical/electronics.....	34,100	3.7	3
Industrial.....	3,870	0.4	8
Marine.....	1,320	0.1	12
Mechanical.....	37,100	4	3
Metallurgical/metallurgists.....	390	<	7
Safety.....	1,740	0.2	9
Nuclear.....	1,280	0.1	19
Sales.....	1,960	0.2	8
Other, n.e.c.....	28,840	3.1	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Engineering and architectural services (SIC 8710) -- continued:</b>			
<b>Technicians.....</b>	255,820	27.5	(nc)
Computer programmer.....	8,710	0.9	3
Drafter.....	94,320	10.1	2
Surveyor.....	67,970	7.3	(nc)
Electrical/electronics engineering technician.....	16,420	1.8	8
Mechanical engineering technicians.....	13,850	1.5	5
Civil engineering technician.....	32,990	3.6	3
All other engineering technicians.....	17,510	1.9	(nc)
Physical and life science technicians.....	4,050	0.4	(nc)
Biological science technician.....	270	<	16
Chemical technicians, except health.....	900	0.1	11
Nuclear technicians.....	370	<	15
All other physical and life science technicians.....	2,510	0.3	(nc)
<b>Accounting, auditing, and bookkeeping (SIC 8720)</b>			
<b>Scientific and technical personnel.....</b>	15,770	2.5	(nc)
<b>Scientists.....</b>	8,830	1.4	(nc)
Operations and systems researchers and analysts.....	1,020	0.2	24
Statisticians.....	100	<	19
All other mathematicians.....	120	<	9
Physical scientists.....	190	<	(nc)
Chemists.....	30	<	4
All other physical scientists.....	160	<	(nc)
Social scientists.....	930	0.2	(nc)
Economists.....	170	<	3
All other social scientists.....	760	0.1	(nc)
Computer analysts.....	6,470	1	(nc)
<b>Managers of scientific and technical personnel.....</b>	1,040	0.2	4
<b>Engineers.....</b>	1,710	0.3	(nc)
Computer.....	670	0.1	2
Electrical/electronics.....	580	0.1	0
Mechanical.....	100	<	11
Other, n.e.c.....	360	0.1	(nc)
<b>Technicians.....</b>	4,190	0.7	(nc)
Computer programmer.....	3,440	0.6	7
Drafter.....	100	<	11
Surveyor.....	50	<	7
All other engineering technicians.....	520	0.1	(nc)
Physical and life science technicians.....	80	<	(nc)
All other physical and life science technicians.....	80	<	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Research and testing services (SIC 8730)</b>			
<b>Scientific and technical personnel.....</b>	244,730	39.4	(nc)
<b>Scientists.....</b>	99,510	16	(nc)
Operations and systems researchers and analysts.....	11,060	1.8	2
Statisticians.....	3,300	0.5	10
All other mathematicians.....	540	0.1	(nc)
Physical scientists.....	25,900	4.2	(nc)
Chemists.....	13,580	2.2	2
Geologists, geophysicists, and earth scientists.....	1,940	0.3	6
Atmospheric and space scientists.....	1,580	0.3	8
Physicists and astronomers.....	3,880	0.6	8
All other physical scientists.....	4,920	0.8	3
Life scientists.....	30,520	4.9	(nc)
Agricultural scientists.....	1,140	0.2	10
Biological scientists.....	19,680	3.2	4
Medical scientists.....	4,860	0.8	5
Foresters and conservation scientists.....	60	<	25
All other life scientists.....	4,780	0.8	15
Social scientists.....	16,840	2.7	(nc)
Economists.....	10,980	1.8	7
Psychologists.....	1,570	0.3	34
Urban and regional planners.....	750	0.1	11
All other social scientists.....	3,540	0.6	8
Computer analysts.....	11,350	1.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	16,560	2.7	2
<b>Engineers.....</b>	55,340	8.9	(nc)
Agricultural.....	320	0.1	24
Chemical.....	2,130	0.3	8
Civil.....	1,830	0.3	10
Computer.....	5,310	0.9	4
Electrical/electronics.....	9,740	1.6	3
Industrial.....	1,080	0.2	6
Marine.....	80	<	33
Mechanical.....	5,910	1	16
Metallurgical/metallurgists.....	1,540	0.3	7
Safety.....	810	0.1	7
Nuclear.....	2,170	0.4	1
Sales.....	510	0.1	10
Other, n.e.c.....	23,910	3.9	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Research and testing services (SIC 8730) -- continued:</b>			
<b>Technicians.....</b>	73,320	11.8	(nc)
Computer programmer.....	9,650	1.6	2
Drafter.....	1,640	0.3	4
Surveyor.....	820	0.1	(nc)
Electrical/electronics engineering technician.....	7,910	1.3	6
Mechanical engineering technicians.....	5,260	0.9	4
Civil engineering technician.....	2,560	0.4	8
All other engineering technicians.....	11,790	1.9	(nc)
Physical and life science technicians.....	33,690	5.4	(nc)
Biological science technician.....	11,900	1.9	4
Chemical technicians, except health.....	11,680	1.9	2
Nuclear technicians.....	1,290	0.2	20
All other physical and life science technicians.....	8,820	1.4	(nc)
<b>Management and public relations (SIC 8740)</b>			
<b>Scientific and technical personnel.....</b>	161,100	15.1	(nc)
<b>Scientists.....</b>	60,030	5.7	(nc)
Operations and systems researchers and analysts.....	7,380	0.7	5
Statisticians.....	760	0.1	10
All other mathematicians.....	1,200	0.1	(nc)
Physical scientists.....	10,920	1	(nc)
Chemists.....	1,720	0.2	8
Geologists, geophysicists, and earth scientists.....	4,900	0.5	2
Atmospheric and space scientists.....	200	<	26
Physicists and astronomers.....	370	<	38
All other physical scientists.....	3,730	0.4	9
Life scientists.....	6,310	0.6	(nc)
Agricultural scientists.....	880	0.1	22
Biological scientists.....	3,390	0.3	24
Medical scientists.....	850	0.1	29
All other life scientists.....	1,190	0.1	(nc)
Social scientists.....	14,460	1.4	(nc)
Economists.....	6,950	0.7	12
Psychologists.....	1,550	0.2	20
Urban and regional planners.....	2,950	0.3	16
All other social scientists.....	3,010	0.3	10
Computer analysts.....	19,000	1.8	(nc)
<b>Managers of scientific and technical personnel.....</b>	10,640	1	6

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Management and public relations (SIC 8740) -- continued:</b>			
<b>Engineers.....</b>	46,080	4.4	(nc)
Aeronautical.....	940	0.1	28
Agricultural.....	230	<	17
Chemical.....	1,070	0.1	4
Civil.....	5,490	0.5	5
Computer.....	11,960	1.1	6
Electrical/electronics.....	10,440	1	1
Industrial.....	2,890	0.3	11
Marine.....	90	<	12
Mechanical.....	3,260	0.3	6
Metallurgical/metallurgists.....	170	<	17
Safety.....	1,750	0.2	14
Sales.....	490	0.1	8
Other, n.e.c.....	7,300	0.7	(nc)
<b>Technicians.....</b>	44,350	4.2	(nc)
Computer programmer.....	21,700	2.1	3
Drafter.....	4,350	0.4	9
Surveyor.....	1,430	0.1	(nc)
Electrical/electronics engineering technician.....	3,440	0.3	7
Mechanical engineering technicians.....	1,120	0.1	5
Civil engineering technician.....	2,330	0.2	12
All other engineering technicians.....	5,640	0.5	(nc)
Physical and life science technicians.....	4,340	0.4	(nc)
Biological science technician.....	820	0.1	14
Chemical technicians, except health.....	680	0.1	12
Nuclear technicians.....	520	0.1	24
All other physical and life science technicians.....	2,320	0.2	(nc)
<b>Services, n.e.c. (SIC 8990)</b>			
<b>Scientific and technical personnel.....</b>	13,170	25.1	(nc)
<b>Scientists.....</b>	6,990	13.3	(nc)
Operations and systems researchers and analysts.....	110	0.2	8
Statisticians.....	170	0.3	14
All other mathematicians.....	1,970	3.8	(nc)
Physical scientists.....	3,830	7.3	(nc)
Chemists.....	170	0.3	18
Geologists, geophysicists, and earth scientists.....	2,000	3.8	10
Atmospheric and space scientists.....	870	1.7	26
Physicists and astronomers.....	140	0.3	37
All other physical scientists.....	650	1.2	15
Life scientists.....	250	0.5	(nc)
Biological scientists.....	120	0.2	35
All other life scientists.....	130	0.3	(nc)

See explanatory information and SOURCE at end of table.

Industry and SET occupation	Filled positions	SET intensity <sup>1</sup>	Relative standard error
<b>Services, n.e.c. (SIC 8990)</b>			
<b>Scientists -- continued:</b>			
Social scientists.....	390	0.8	(nc)
Economists.....	40	0.1	20
All other social scientists.....	350	0.7	(nc)
Computer analysts.....	270	0.5	(nc)
<b>Managers of scientific and technical personnel.....</b>	640	1.2	11
<b>Engineers.....</b>	1,630	3.1	(nc)
Agricultural.....	30	0.1	16
Chemical.....	60	0.1	13
Civil.....	320	0.6	10
Computer.....	160	0.3	10
Electrical/electronics.....	120	0.2	13
Mechanical.....	80	0.2	28
Safety.....	60	0.1	16
Nuclear.....	50	0.1	33
Other, n.e.c.....	750	1.4	(nc)
<b>Technicians.....</b>	3,910	7.5	(nc)
Computer programmer.....	620	1.2	4
Drafter.....	500	1	10
Surveyor.....	60	0.1	13
Electrical/electronics engineering technician.....	260	0.5	9
Mechanical engineering technicians.....	90	0.2	10
Civil engineering technician.....	160	0.3	13
All other engineering technicians.....	430	0.8	10
Physical and life science technicians.....	1,790	3.4	(nc)
Chemical technicians, except health.....	120	0.2	19
Nuclear technicians.....	260	0.5	31
All other physical and life science technicians.....	1,410	2.7	(nc)

<sup>1</sup>SET intensity = the ratio of SET employment (including SET managers) in a given SIC to total employment in that SIC, expressed in percentage terms.

**NOTE:** Because of rounding, components may not add to totals.

**KEY:**

- nc = Not computed
- < = The estimated actual value is less than 0.05 for percentages. For relative standard error, < = a small value rounded to 0. Estimated actual values of zero for relative standard error are shown as 0.
- 0 = Data were collected and the reported number or value was zero.
- n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/Division of Science Resources Statistics, using data from U.S. Department of Labor/Bureau of Labor Statistics, Occupational Employment Statistics Survey